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ABSTRACT

Updated Defense Economic Impact Modeling System (DEIMS) manpower data are provided. Skilled-labor demand by job categories and industrial sectors are estimated for 163 skill categories. Both defense and non-defense demands are presented for the years 1982 to 1987. The average annual percentage growth for the time period is also estimated. Data are provided for these industrial occupations that include the 163 skill categories: engineers, life and physical scientists and mathematicians, engineering and science technicians, health workers, technicians, computer specialists, social scientists and other professionals, business professionals and staff, craft and related workers, operatives, service workers, and laborers. (YLB)

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Specific material on the Defense Economic Impact Modeling System as listed in Appendices I through III can be obtained from the Defense Industrial Resources Support Office as listed above.

SKILL CATEGORIES INCLUDED WITHIN
DEFENSE ECONOMIC IMPACT MODELING SYSTEM
SKILLED LABOR DEMAND MODEL*

	Aggregate Skill Categories
ENGINEERS	(1)
Aero-Astronautic Engineers	(2)
Chemical Engineers	(3)
Civil Engineers	(4)
Electrical Engineers	(5)
Industrial Engineers	(6)
Mechanical Engineers	(7)
Metallurgical Engineers	(8)
Mining Engineers	(9)
Petroleum	(10)
Engineers, NEC	(11)
LIFE AND PHYSICAL SCIENTISTS & MATHEMATICIANS	(12)
Chemists	(13)
Physicists	(14)
Biological & Medical Scientists	(15)
Life and Physical Scientists, NEC	(16)
Mathematicians and Statisticians	(17)
Mathematical Specialists, NEC	(18)
ENGINEERING AND SCIENCE TECHNICIANS	(19)
Civil Engineering Technicians	(20)
Drafters	(21)
Electrical and Electronic Technicians	(22)
Industrial Engineering Technicians	(23)
Mechanical Engineering Technicians	(24)
Engineering and Science Technicians	(25)
HEALTH WORKERS	(26)
Dentists	(27)
Nurses, professional	(28)
Physicians, medical & osteopathic	(29)
Other Health Professionals	(30)
Other Health Workers	(31)
TECHNICIANS, exc. Health, Science, and Eng.	(32)
Airplane Pilots & Flight Engineers	(33)
Air Traffic Controllers	(34)
Radio Operators	(35)
Technical Assistants, Library	(36)
Tool Programmers, Numerical Control	(37)
Tech., exc. health, science, and eng, NEC	(38)
COMPUTER SPECIALISTS	(39)
Computer Programmers	(40)
Computer Systems Analysts	(41)
SOCIAL SCIENTISTS & other professionals	(42)
Economists	(43)
All Other Social Scientists	(44)

Teachers	(45)
College and University Teachers	(46)
Elementary and Secondary School Teachers	(47)
Vocational Education Teachers	(48)
Teachers, NEC	(49)
Selected Writers, Artists, and Entertainers	(50)
Professional & Technical Workers, NEC	(51)
BUSINESS PROFESSIONALS AND STAFF	(52)
Managers, Officials, and Proprietors	(53)
Sales Workers	(54)
Clerical Workers	(55)
Computer, peripheral equipment operators	(56)
Computer operators	(57)
Peripheral EDP equipment operators	(58)
Secretaries, Typists, & Other Office Machine Operators	(59)
Clerical Workers, NEC	(60)
CRAFT AND RELATED WORKERS	(61)
Construction Craft Workers	(62)
Electricians	(63)
Fitters, pipelaying	(64)
Plumers and pipefitters	(65)
Refractory Materials Repairs	(66)
Shipwrights	(67)
Structural Steel Workers	(68)
Construction Craft Workers, NEC	(69)
Mechanics, Repairers, and Installers	(70)
Aircraft Mechanics	(71)
Auto Mechanics & Repairers	(72)
Data Processing Machine Mechanics	(73)
Diesel Mechanics	(74)
Electrical Instrument and Tool Repairers	(75)
Electric Motor Repairers	(76)
Engineering Equipment Mechanics	(77)
Instrument Repairers	(78)
Maintenance Mechanics, Repairers General Utility	(79)
Marine Mechanics and Repairers	(80)
Millwrights	(81)
Telephone Installers and Repairers	(82)
Mechanics, Repairers, and Installers, NEC	(83)
Metalworking Craft Workers, except mechanics	(84)
Blacksmiths	(85)
Boilermakers	(86)
Coremakers, hand, bench, floor	(87)
Forging Press Operators	(88)
Header Operators	(89)
Heat Treaters, Annealers, and Tenperers	(90)
Layout Markers, Metal	(91)
Machine Tool Setters, Metalworking	(92)
Machinists	(93)
Molders, metal	(94)
Molders, bench and floor	(95)
Molders, machine	(96)
All other molders, metal	(97)
Patternmakers, Metal	(98)
Punch Press Setters, Metal	(99)

    - Rolling Mill Operators and Helpers (100)
    - Shear and Slitter Setters (101)
    - Sheet-metal Workers and Tinsmiths (102)
    - Tool and Die Makers (103)
    - Metalworking Craft Workers, NEC (104)
  - Printing Trades Craft Workers (105)
  - Other Craft and Related Workers (106)
    - Auxiliary Equipment Operators (107)
    - Blue Collar Worker Supervisors (108)
    - Heavy Equipment Operators (109)
    - Inspectors (110)
    - Lens Grinders (111)
    - Machine Setters, Plastic Materials (112)
    - Patternmakers, Wood (113)
    - Patternmakers, NEC (114)
    - Shipfitters (115)
    - Shipengineers (116)
    - Testers (117)
    - Craft and Related Workers, NEC (118)
- OPERATIVES (119)
  - Assemblers (120
    - Aircraft Structure and Surface Assemblers (121)
    - Electrical and Electronic Assemblers (122)
    - Electro-mechanical Equipment Assemblers (123)
    - Instrument Makers and Assemblers (124)
    - Machine Assemblers (125)
    - Assemblers, NEC (126)
  - Metalworking Operatives (127)
    - Drill Press and Boring Machine Operators (128)
    - Electroplators (129)
    - Grinding and Abrading Machine Operators Metal (130)
    - Heaters, Metal (131)
    - Lathe Machine Operators, Metal (132)
    - Machine Tool Operators, Combination (133)
    - Machine Tool Operators, Numerical Control (134)
    - Machine Tool Operators, Tool Room (135)
    - Milling and Planning Machine Operators (136)
    - Pourers, Metal (137)
    - Power Break and Bending Machie Ops., Metal (138)
    - Punch Press Operators, Metal (139)
    - Welders and Flamecutters (140)
    - Metalworking Operatives, NEC (141)
  - All Other Operatives (142)
    - Batch Plant Operators (143)
    - Blasters (144)
    - Boring Machine Operators, Wood (145)
    - Coil Finishers (146)
    - Cutters, Machine (147)
    - Cutters, Portable Machine (148)
    - Cutter-finisher Operators, Rubber Goods (149)
    - Die Cutters and Clicking Machine Operators (150)
    - Drillers, Hand and Machine (151)
    - Filers, Grinders, Buffers and Chippers (152)
    - Furnance Operators and Tenders, Except Metal (153)
    - Winding Operators, NEC (154)

Wirers, Electronic	(155)
Operatives, NEC	(156)
SERVICE WORKERS	(157)
Food Service Workers	(158)
Selected Health Service Workers	(159)
Protected Service Workers	(160)
Service Workers, NEC	(161)
LABORERS, except farm	(162)
Farmers and Farm Workers	(163)

*Based on Bureau of Labor Statistics, National OES Matrices

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
1. ENGINEERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
3. FORESTRY & FISHERY PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	5.92
5. IRON ORE MINING	0.05	0.06	0.06	0.07	0.07	0.07	8.30
6. NONFERROUS METAL MINING	0.09	0.10	0.11	0.13	0.14	0.14	10.77
7. COAL MINING	0.10	0.12	0.13	0.15	0.16	0.17	11.15
8. CRUDE PETROLEUM & N. GAS	0.84	0.92	0.99	1.07	1.16	1.20	7.50
9. STONE&CLAY MINING & QUARRYING	0.02	0.02	0.02	0.03	0.03	0.03	9.96
10. CHEM&FERTILIZER MIN. MINING	0.01	0.01	0.01	0.01	0.01	0.01	7.89
11. NEW CONSTRUCTION	1.61	1.83	1.98	2.19	2.37	2.50	9.17
13. ORDNANCE & ACCESSORIES	29.86	34.54	38.44	42.39	45.57	48.15	10.03
14. FOOD & KINDRED PRODUCTS	0.02	0.02	0.03	0.03	0.03	0.03	5.19
16. FABRIC,YARN & THREAD MILLS	0.03	0.03	0.03	0.03	0.03	0.03	5.03
17. MISC. TEXTILE GOODS	0.01	0.01	0.01	0.01	0.02	0.02	7.10
18. APPAREL	0.01	0.01	0.01	0.01	0.01	0.01	6.08
19. MISC. FABRICATED TEXTILE PROD.	0.02	0.02	0.02	0.02	0.02	0.02	4.69
20. LUMBER & WOOD PRODUCTS	0.02	0.03	0.03	0.03	0.04	0.04	10.18
22. HOUSEHOLD FURNITURE	0.01	0.01	0.01	0.01	0.01	0.01	3.70
23. OTHER FURNITURE & FIXTURES	0.02	0.02	0.02	0.02	0.02	0.02	4.62
24. PAPER & ALLIED PRODUCTS	0.10	0.11	0.12	0.13	0.14	0.14	6.60
25. PAPERBOARD CONTAINERS & BOXES	0.02	0.02	0.02	0.02	0.03	0.03	8.77
26. PRINTING & PUBLISHING	0.03	0.03	0.03	0.03	0.03	0.03	5.93
27. CHEMICALS & PRODUCTS	1.00	1.12	1.22	1.33	1.45	1.53	8.89
28. PLASTICS & SYNTHETIC MATLS.	0.21	0.23	0.26	0.28	0.30	0.32	8.71
29. DRUGS,CLEANING & TOILET PREP.	0.02	0.02	0.02	0.02	0.02	0.02	4.18
30. PAINTS & ALLIED PRODUCTS	0.02	0.02	0.02	0.03	0.03	0.03	8.23
31. PET REFINING & REL. PROD.	0.41	0.44	0.47	0.51	0.54	0.56	6.27
32. RUBBER & MISC. PLASTICS PROD.	0.22	0.25	0.28	0.31	0.34	0.36	10.33
35. GLASS & GLASS PRODUCTS	0.04	0.04	0.05	0.05	0.06	0.06	9.22
36. STONE & CLAY PRODUCTS	0.13	0.15	0.16	0.17	0.19	0.19	8.02
37. PRIMARY FERROUS METALS	0.62	0.70	0.77	0.84	0.90	0.95	8.75
38. NONFERROUS METALS	0.64	0.74	0.82	0.90	0.98	1.02	9.69
39. METAL CONTAINERS	0.01	0.01	0.01	0.01	0.01	0.01	6.58
40. FAB. STRUCTURAL METAL PRODUCTS	0.59	0.67	0.71	0.77	0.82	0.86	7.88
41. SCREW MACHINE PROD.&STAMPINGS	0.22	0.24	0.26	0.28	0.30	0.31	7.71
42. OTHER FAB. METAL PRODUCTS	0.27	0.31	0.34	0.38	0.41	0.44	9.98
43. ENGINES & TURBINES	0.48	0.55	0.62	0.66	0.71	0.75	9.23
44. FARM & GARDEN MACHINERY	0.01	0.01	0.01	0.01	0.02	0.02	10.61
45. CONSTR. & MINING MACHINERY	0.12	0.13	0.15	0.16	0.18	0.18	9.27

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
1. ENGINEERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
46. MATERIALS HANDLING MACH. & EQ.	0.20	0.24	0.26	0.30	0.32	0.34	11.18
47. METALWORKING MACH. & EQ.	0.57	0.67	0.75	0.85	0.94	1.00	11.79
48. SPECIAL INDUSTRY MACHINERY	0.04	0.05	0.05	0.06	0.07	0.08	13.72
49. GENERAL INDUSTRY MACHINERY	0.51	0.58	0.63	0.69	0.74	0.78	9.01
50. MISC. NONELECTRICAL MACH.	0.33	0.37	0.41	0.45	0.48	0.50	8.31
51. OFFICE,COMPUTING & ACCT. MACH.	1.72	2.00	2.20	2.40	2.53	2.63	8.84
52. SERVICE INDUSTRY MACHINES	0.07	0.09	0.10	0.11	0.13	0.14	14.77
53. ELECTRICAL MACHINERY	0.65	0.75	0.83	0.91	0.99	1.04	9.74
54. HOUSEHOLD APPLIANCES	0.01	0.01	0.01	0.01	0.01	0.01	9.50
55. ELECTRIC LIGHTING & WIRING EQ.	0.22	0.24	0.26	0.29	0.31	0.32	8.25
56. RADIO,TV, & COMMUNICATION EQ.	33.01	38.49	42.86	47.09	50.18	51.93	9.49
57. ELECTRONIC COMPONENTS & ACCESS.	6.21	7.52	8.61	9.78	10.83	11.51	13.14
58. MISC. ELECTRICAL MACH. & EQ.	0.15	0.18	0.19	0.21	0.23	0.24	9.57
59. MOTOR VEHICLES & EQUIPMENT	0.38	0.46	0.52	0.62	0.73	0.85	17.26
60. AIRCRAFT & PARTS	32.18	37.20	41.85	47.12	51.39	53.76	10.81
61. OTHER TRANSPORTATION EQ.	1.64	1.73	1.78	1.82	1.87	1.92	3.19
62. INSTRUMENTS & SUPPLIES	3.57	4.07	4.49	4.96	5.34	5.58	9.30
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.37	0.41	0.45	0.50	0.54	0.57	8.92
64. MISC. MANUFACTURING	0.03	0.03	0.03	0.04	0.04	0.04	6.66
65. TRANSPORTATION & WAREHOUSING	0.33	0.35	0.36	0.39	0.40	0.40	4.01
66. COMMUNICATION EXC. RADIO & TV	0.82	0.89	0.96	1.06	1.14	1.18	7.51
67. RADIO & TV BROADCASTING	0.19	0.22	0.24	0.26	0.28	0.30	9.77
68. UTILITIES	0.68	0.75	0.82	0.89	0.95	0.98	7.66
69. WHOLESALE & RETAIL TRADE	0.31	0.35	0.39	0.43	0.47	0.49	9.57
70. FINANCE & INSURANCE	0.04	0.05	0.05	0.06	0.06	0.07	9.17
71. REAL ESTATE & RENTAL	0.02	0.02	0.02	0.02	0.02	0.02	8.38
72. PERSONAL SERVICES EXC. AUTO.	0.03	0.04	0.04	0.04	0.05	0.05	9.33
73. BUSINESS SERVICES	2.58	2.92	3.23	3.59	3.87	4.05	9.44
77. MISC. SERVICES	0.96	1.00	1.05	1.13	1.19	1.23	5.08
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	5.76	6.12	6.48	6.87	7.12	7.27	4.79
82. GOVERNMENT INDUSTRY	49.93	49.11	50.21	51.75	52.76	53.27	1.30
TOTAL, ALL INDUSTRIES	181.43	200.45	218.41	237.84	253.13	262.91	7.70
TOTAL EMPLOYMENT							
3. FORESTRY & FISHERY PRODUCTS	0.25	0.26	0.28	0.29	0.29	0.28	2.96
5. IRON ORE MINING	0.94	1.01	1.08	1.08	1.06	1.04	2.11
6. NONFERROUS METAL MINING	1.49	1.57	1.63	1.67	1.66	1.67	2.21
7. COAL MINING	3.62	3.90	4.13	4.31	4.53	4.69	5.35

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
I. ENGINEERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
8. CRUDE PETROLEUM & N. GAS	11.37	11.74	12.10	12.24	12.43	12.90	2.56
9. STONE&CLAY MINING & QUARRYING	0.61	0.62	0.64	0.67	0.69	0.69	2.56
10. CHEM&FERTILIZER MIN. MINING	0.48	0.49	0.51	0.52	0.52	0.53	1.99
11. NEW CONSTRUCTION	42.84	43.97	45.08	46.73	48.08	48.97	2.71
13. ORDNANCE & ACCESSORIES	49.40	51.66	53.69	56.04	57.86	59.53	3.80
14. FOOD & KINDRED PRODUCTS	3.41	3.46	3.48	3.47	3.44	3.42	0.07
16. FABRIC,YARN & THREAD MILLS	2.05	2.11	2.16	2.21	2.22	2.22	1.63
17. MISC. TEXTILE GOODS	0.81	0.84	0.87	0.90	0.92	0.92	2.71
18. APPAREL	2.50	2.52	2.58	2.62	2.63	2.63	1.04
19. MISC. FABRICATED TEXTILE PROD.	0.61	0.63	0.65	0.66	0.67	0.67	1.86
20. LUMBER & WOOD PRODUCTS	1.17	1.28	1.34	1.41	1.44	1.44	4.30
22. HOUSEHOLD FURNITURE	1.06	1.12	1.16	1.20	1.22	1.24	3.03
23. OTHER FURNITURE & FIXTURES	1.14	1.15	1.19	1.22	1.25	1.28	2.20
24. PAPER & ALLIED PRODUCTS	5.54	5.70	5.76	5.78	5.77	5.76	0.77
25. PAPERBOARD CONTAINERS & BOXES	0.82	0.84	0.86	0.87	0.88	0.89	1.71
26. PRINTING & PUBLISHING	1.60	1.60	1.61	1.62	1.62	1.62	0.32
27. CHEMICALS & PRODUCTS	20.82	21.48	22.09	22.57	22.95	23.32	2.30
28. PLASTICS & SYNTHETIC MATLS.	8.62	8.94	9.27	9.50	9.63	9.67	2.31
29. DRUGS,CLEANING & TOILET PREP.	4.49	4.53	4.60	4.65	4.66	4.67	0.77
30. PAINTS & ALLIED PRODUCTS	0.38	0.40	0.41	0.42	0.43	0.44	3.00
31. PET REFINING & REL. PROD.	7.70	7.76	7.89	8.04	8.13	8.20	1.28
32. RUBBER & MISC. PLASTICS PROD.	8.14	8.42	8.78	9.06	9.30	9.39	2.90
35. GLASS & GLASS PRODUCTS	1.74	1.77	1.80	1.81	1.81	1.79	0.53
36. STONE & CLAY PRODUCTS	4.09	4.16	4.22	4.31	4.32	4.26	0.81
37. PRIMARY FERROUS METALS	8.77	9.12	9.49	9.69	9.80	9.84	2.33
38. NONFERROUS METALS	7.62	7.93	8.28	8.55	8.71	8.86	3.08
39. METAL CONTAINERS	0.67	0.66	0.66	0.67	0.67	0.68	0.33
40. FAB. STRUCTURAL METAL PRODUCTS	13.22	13.28	13.64	14.13	14.46	14.69	2.13
41. SCREW MACHINE PROD.&STAMPINGS	3.50	3.68	3.80	3.87	3.89	3.90	2.18
42. OTHER FAB. METAL PRODUCTS	5.91	6.11	6.39	6.61	6.77	6.94	3.26
43. ENGINES & TURBINES	5.80	6.08	6.40	6.56	6.69	6.80	3.21
44. FARM & GARDEN MACHINERY	2.96	3.12	3.36	3.48	3.60	3.71	4.64
45. CONSTR. & MINING MACHINERY	9.99	10.79	11.58	12.22	12.76	13.12	5.60
46. MATERIALS HANDLING MACH. & EQ.	3.57	3.77	4.07	4.32	4.52	4.68	5.58
47. METALWORKING MACH. & EQ.	11.09	11.83	12.82	13.63	14.33	14.89	6.07
48. SPECIAL INDUSTRY MACHINERY	5.49	5.70	6.08	6.44	6.69	6.93	4.74
49. GENERAL INDUSTRY MACHINERY	11.58	12.05	12.80	13.32	13.73	14.12	4.05
50. MISC. NONELECTRICAL MACH.	2.92	3.02	3.17	3.27	3.32	3.38	2.96
51. OFFICE,COMPUTING & ACCT. MACH.	45.62	48.22	51.02	52.68	54.11	56.00	4.18

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
1. ENGINEERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
52. SERVICE INDUSTRY MACHINES	3.99	4.21	4.47	4.60	4.66	4.72	3.37
53. ELECTRICAL MACHINERY	13.10	13.42	14.11	14.51	14.75	14.93	2.65
54. HOUSEHOLD APPLIANCES	2.85	2.93	3.01	3.11	3.18	3.22	2.48
55. ELECTRIC LIGHTING & WIRING EQ.	4.54	4.57	4.69	4.81	4.88	4.94	1.70
56. RADIO,TV, & COMMUNICATION EQ.	78.15	81.09	84.75	87.32	89.19	91.74	3.26
57. ELECTRONIC COMPONENTS & ACCESS.	28.34	30.08	32.10	33.93	35.43	36.69	5.30
58. MISC. ELECTRICAL MACH. & EQ.	5.69	5.89	6.12	6.20	6.27	6.32	2.12
59. MOTOR VEHICLES & EQUIPMENT	19.82	20.74	21.47	21.83	22.09	22.24	2.33
60. AIRCRAFT & PARTS	64.46	68.50	71.85	75.62	77.30	78.72	4.08
61. OTHER TRANSPORTATION EQ.	5.68	5.83	6.03	6.15	6.16	6.20	1.78
62. INSTRUMENTS & SUPPLIES	30.71	31.58	33.17	34.80	36.05	36.98	3.79
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	8.65	8.81	9.22	9.66	10.01	10.30	3.54
64. MISC. MANUFACTURING	2.53	2.58	2.68	2.77	2.83	2.87	2.60
65. TRANSPORTATION & WAREHOUSING	7.82	7.97	8.10	8.27	8.29	8.26	1.10
66. COMMUNICATION EXC. RADIO & TV	33.20	34.25	35.89	37.06	38.71	39.86	3.72
67. RADIO & TV BROADCASTING	9.54	10.00	10.43	10.73	10.96	11.18	3.24
68. UTILITIES	31.49	32.06	32.59	33.10	33.65	34.13	1.62
69. WHOLESALE & RETAIL TRADE	50.91	52.53	54.14	55.51	56.58	57.69	2.53
70. FINANCE & INSURANCE	4.99	5.07	5.16	5.29	5.42	5.54	2.10
71. REAL ESTATE & RENTAL	0.60	0.61	0.63	0.64	0.65	0.66	2.00
72. PERSONAL SERVICES EXC. AUTO.	1.76	1.81	1.86	1.92	1.97	2.02	2.74
73. BUSINESS SERVICES	53.15	55.29	57.64	60.34	62.71	64.68	4.01
77. MISC. SERVICES	149.17	152.76	156.77	161.89	167.60	173.83	3.11
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	33.56	34.59	35.81	36.98	37.95	38.85	2.97
82. GOVERNMENT INDUSTRY	192.44	192.95	195.69	199.95	204.22	208.17	1.58
TOTAL, ALL INDUSTRIES	1,166.64	1,202.51	1,244.92	1,285.43	1,319.09	1,350.55	2.97

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE
BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
2. AERO-ASTRONAUTIC ENGINEERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	13.63	15.99	18.03	20.11	21.86	23.33	11.35
42. OTHER FAB. METAL PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	10.14
43. ENGINES & TURBINES	0.01	0.01	0.01	0.01	0.01	0.01	7.76
56. RADIO,TV, & COMMUNICATION EQ.	0.68	0.78	0.86	0.93	0.98	1.01	8.24
57. ELECTRONIC COMPONENTS & ACCESS.	0.02	0.02	0.03	0.03	0.03	0.04	11.35
60. AIRCRAFT & PARTS	13.50	15.93	18.26	20.92	23.19	24.64	12.78
62. INSTRUMENTS & SUPPLIES	0.07	0.07	0.08	0.09	0.09	0.10	7.85
65. TRANSPORTATION & WAREHOUSING	0.05	0.05	0.06	0.06	0.06	0.06	4.84
73. BUSINESS SERVICES	0.18	0.20	0.22	0.25	0.27	0.28	9.58
77. MISC. SERVICES	0.01	0.01	0.01	0.01	0.01	0.01	3.89
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.20	0.22	0.24	0.26	0.27	0.28	7.02
82. GOVERNMENT INDUSTRY	3.50	3.47	3.57	3.71	3.80	3.87	2.02
TOTAL, ALL INDUSTRIES	31.87	36.79	41.40	46.42	50.64	53.67	10.98
TOTAL EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	22.55	23.92	25.18	26.60	27.76	28.85	5.05
42. OTHER FAB. METAL PRODUCTS	0.19	0.20	0.21	0.21	0.22	0.22	3.42
43. ENGINES & TURBINES	0.09	0.09	0.09	0.10	0.10	0.10	1.82
56. RADIO,TV, & COMMUNICATION EQ.	1.61	1.65	1.70	1.73	1.75	1.78	2.08
57. ELECTRONIC COMPONENTS & ACCESS.	0.09	0.10	0.10	0.11	0.11	0.11	3.63
60. AIRCRAFT & PARTS	27.05	29.33	31.35	33.57	34.89	36.08	5.93
62. INSTRUMENTS & SUPPLIES	0.56	0.57	0.59	0.61	0.62	0.63	2.41
65. TRANSPORTATION & WAREHOUSING	1.20	1.23	1.26	1.30	1.31	1.32	1.91
73. BUSINESS SERVICES	3.63	3.78	3.95	4.14	4.30	4.44	4.14
77. MISC. SERVICES	1.84	1.86	1.89	1.93	1.98	2.03	1.94
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.45	0.47	0.50	0.52	0.54	0.56	4.58
82. GOVERNMENT INDUSTRY	13.91	14.03	14.33	14.75	15.16	15.53	2.23
TOTAL, ALL INDUSTRIES	74.12	78.21	82.16	86.60	89.80	92.72	4.58

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
3. CHEMICAL ENGINEERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
8. CRUDE PETROLEUM & N. GAS	0.03	0.03	0.04	0.04	0.04	0.04	4.80
11. NEW CONSTRUCTION	0.10	0.12	0.13	0.14	0.15	0.16	8.37
13. ORDNANCE & ACCESSORIES	0.21	0.23	0.25	0.27	0.28	0.29	6.75
24. PAPER & ALLIED PRODUCTS	0.02	0.03	0.03	0.03	0.03	0.03	6.57
27. CHEMICALS & PRODUCTS	0.55	0.62	0.68	0.75	0.82	0.87	9.86
28. PLASTICS & SYNTHETIC MATLS.	0.10	0.11	0.12	0.13	0.14	0.15	8.70
30. PAINTS & ALLIED PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	8.22
31. PET REFINING & REL. PROD.	0.16	0.17	0.18	0.20	0.22	0.23	8.05
32. RUBBER & MISC. PLASTICS PROD.	0.03	0.03	0.03	0.04	0.04	0.04	10.31
35. GLASS & GLASS PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	9.84
36. STONE & CLAY PRODUCTS	0.04	0.04	0.04	0.05	0.05	0.05	8.21
37. PRIMARY FERROUS METALS	0.01	0.01	0.01	0.01	0.01	0.01	7.23
38. NONFERROUS METALS	0.03	0.04	0.04	0.04	0.05	0.05	9.69
40. FAB. STRUCTURAL METAL PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	7.20
42. OTHER FAB. METAL PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	9.34
49. GENERAL INDUSTRY MACHINERY	0.01	0.01	0.01	0.01	0.01	0.02	7.50
51. OFFICE,COMPUTING & ACCT. MACH.	0.01	0.01	0.01	0.01	0.01	0.01	7.30
55. ELECTRIC LIGHTING & WIRING EQ.	0.01	0.01	0.01	0.01	0.01	0.01	8.23
56. RADIO,TV, & COMMUNICATION EQ.	0.23	0.26	0.29	0.31	0.33	0.34	8.13
57. ELECTRONIC COMPONENTS & ACCESS.	0.17	0.20	0.22	0.25	0.27	0.28	11.37
58. MISC. ELECTRICAL MACH. & EQ.	0.01	0.01	0.01	0.01	0.01	0.01	9.57
60. AIRCRAFT & PARTS	0.32	0.36	0.39	0.43	0.47	0.48	8.59
61. OTHER TRANSPORTATION EQ.	0.06	0.07	0.07	0.07	0.07	0.07	3.41
62. INSTRUMENTS & SUPPLIES	0.07	0.08	0.08	0.09	0.10	0.10	8.17
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.02	0.02	0.02	0.03	0.03	0.03	8.50
68. UTILITIES	0.05	0.06	0.06	0.07	0.07	0.07	6.17
69. WHOLESALE & RETAIL TRADE	0.01	0.02	0.02	0.02	0.02	0.02	8.88
73. BUSINESS SERVICES	0.22	0.25	0.28	0.31	0.33	0.35	9.51
77. MISC. SERVICES	0.04	0.04	0.04	0.04	0.04	0.04	3.99
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.04	0.04	0.04	0.04	0.05	0.05	5.28
82. GOVERNMENT INDUSTRY	0.63	0.62	0.63	0.65	0.66	0.67	1.01
TOTAL, ALL INDUSTRIES	3.22	3.54	3.82	4.14	4.41	4.58	7.26
TOTAL EMPLOYMENT							
8. CRUDE PETROLEUM & N. GAS	0.44	0.44	0.45	0.44	0.44	0.44	-0.01
11. NEW CONSTRUCTION	2.76	2.81	2.86	2.95	3.01	3.05	1.96

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
3. CHEMICAL ENGINEERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
13. ORDNANCE & ACCESSORIES	0.34	0.35	0.35	0.36	0.36	0.36	0.71
24. PAPER & ALLIED PRODUCTS	1.24	1.28	1.29	1.29	1.29	1.29	0.74
27. CHEMICALS & PRODUCTS	11.36	11.84	12.29	12.67	12.99	13.30	3.21
28. PLASTICS & SYNTHETIC MATLS.	4.01	4.16	4.31	4.42	4.48	4.50	2.31
30. PAINTS & ALLIED PRODUCTS	0.17	0.18	0.19	0.20	0.20	0.20	2.99
31. PET REFINING & REL. PROD.	2.89	2.96	3.06	3.17	3.26	3.35	2.98
32. RUBBER & MISC. PLASTICS PROD.	1.01	1.04	1.09	1.12	1.15	1.16	2.88
35. GLASS & GLASS PRODUCTS	0.32	0.32	0.33	0.34	0.34	0.33	1.09
36. STONE & CLAY PRODUCTS	1.09	1.11	1.12	1.15	1.16	1.14	0.99
37. PRIMARY FERROUS METALS	0.11	0.11	0.11	0.11	0.11	0.11	0.90
38. NONFERROUS METALS	0.38	0.39	0.41	0.42	0.43	0.44	3.08
40. FAB. STRUCTURAL METAL PRODUCTS	0.23	0.23	0.24	0.25	0.25	0.25	1.49
42. OTHER FAB. METAL PRODUCTS	0.17	0.17	0.18	0.18	0.19	0.19	2.67
49. GENERAL INDUSTRY MACHINERY	0.24	0.25	0.26	0.27	0.27	0.28	2.61
51. OFFICE,COMPUTING & ACCT. MACH.	0.15	0.16	0.16	0.17	0.17	0.17	2.71
55. ELECTRIC LIGHTING & WIRING EQ.	0.16	0.16	0.16	0.16	0.17	0.17	1.68
56. RADIO,TV, & COMMUNICATION EQ.	0.54	0.55	0.57	0.58	0.58	0.59	1.98
57. ELECTRONIC COMPONENTS & ACCESS.	0.75	0.79	0.82	0.86	0.88	0.90	3.65
58. MISC. ELECTRICAL MACH. & EQ.	0.24	0.25	0.26	0.26	0.26	0.27	2.12
60. AIRCRAFT & PARTS	0.63	0.66	0.68	0.70	0.70	0.70	2.00
61. OTHER TRANSPORTATION EQ.	0.21	0.22	0.23	0.23	0.23	0.24	2.00
62. INSTRUMENTS & SUPPLIES	0.58	0.59	0.61	0.63	0.65	0.66	2.71
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.46	0.46	0.48	0.51	0.52	0.54	3.14
68. UTILITIES	2.50	2.51	2.52	2.52	2.53	2.53	0.21
69. WHOLESALE & RETAIL TRADE	2.27	2.33	2.38	2.43	2.46	2.49	1.89
73. BUSINESS SERVICES	4.53	4.72	4.92	5.16	5.36	5.53	4.07
77. MISC. SERVICES	5.45	5.52	5.60	5.72	5.87	6.03	2.04
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.51	0.52	0.53	0.55	0.56	0.57	2.37
82. GOVERNMENT INDUSTRY	2.82	2.81	2.84	2.89	2.94	2.98	1.07
TOTAL, ALL INDUSTRIES	51.55	52.94	54.43	55.86	56.99	57.95	2.37

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

Page 2

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
4. CIVIL ENGINEERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
8. CRUDE PETROLEUM & N. GAS	0.04	0.04	0.04	0.04	0.04	0.04	4.68
11. NEW CONSTRUCTION	0.60	0.69	0.75	0.83	0.91	0.96	9.86
13. ORDNANCE & ACCESSORIES	0.12	0.14	0.15	0.16	0.17	0.18	7.33
27. CHEMICALS & PRODUCTS	0.03	0.04	0.04	0.04	0.05	0.05	7.52
28. PLASTICS & SYNTHETIC MATLS.	0.01	0.01	0.01	0.01	0.01	0.01	8.73
31. PET REFINING & REL. PROD.	0.04	0.04	0.04	0.05	0.05	0.05	5.18
36. STONE & CLAY PRODUCTS	0.01	0.01	0.01	0.01	0.02	0.02	8.15
37. PRIMARY FERROUS METALS	0.04	0.04	0.04	0.05	0.05	0.05	7.19
38. NONFERROUS METALS	0.01	0.01	0.01	0.01	0.02	0.02	10.15
40. FAB. STRUCTURAL METAL PRODUCTS	0.05	0.05	0.05	0.06	0.06	0.06	7.10
42. OTHER FAB. METAL PRODUCTS	0.01	0.01	0.02	0.02	0.02	0.02	10.13
45. CONSTR. & MINING MACHINERY	0.01	0.01	0.01	0.01	0.01	0.01	7.25
46. MATERIALS HANDLING MACH. & EQ.	0.01	0.01	0.01	0.02	0.02	0.02	9.12
49. GENERAL INDUSTRY MACHINERY	0.01	0.01	0.01	0.01	0.01	0.01	7.53
56. RADIO,TV, & COMMUNICATION EQ.	0.25	0.28	0.31	0.34	0.36	0.37	8.24
57. ELECTRONIC COMPONENTS & ACCESS.	0.02	0.03	0.03	0.03	0.04	0.04	11.38
60. AIRCRAFT & PARTS	0.14	0.16	0.18	0.20	0.21	0.22	8.61
61. OTHER TRANSPORTATION EQ.	0.09	0.10	0.10	0.10	0.10	0.11	3.41
62. INSTRUMENTS & SUPPLIES	0.01	0.01	0.01	0.02	0.02	0.02	8.18
65. TRANSPORTATION & WAREHOUSING	0.08	0.08	0.08	0.09	0.09	0.09	2.52
66. COMMUNICATION EXC. RADIO & TV	0.02	0.02	0.02	0.03	0.03	0.03	5.42
68. UTILITIES	0.05	0.05	0.06	0.06	0.07	0.07	6.38
69. WHOLESALE & RETAIL TRADE	0.01	0.01	0.02	0.02	0.02	0.02	9.69
71. REAL ESTATE & RENTAL	0.01	0.01	0.01	0.01	0.01	0.01	8.36
73. BUSINESS SERVICES	0.13	0.14	0.15	0.17	0.18	0.18	6.84
77. MISC. SERVICES	0.37	0.39	0.41	0.44	0.46	0.48	4.98
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.71	0.71	0.74	0.77	0.79	0.81	2.72
82. GOVERNMENT INDUSTRY	8.45	8.40	8.68	9.04	9.31	9.49	2.34
TOTAL, ALL INDUSTRIES	11.39	11.59	12.09	12.71	13.20	13.51	3.47
TOTAL EMPLOYMENT							
8. CRUDE PETROLEUM & N. GAS	0.48	0.48	0.48	0.48	0.47	0.48	-0.12
11. NEW CONSTRUCTION	15.96	16.49	17.03	17.76	18.38	18.83	3.37
13. ORDNANCE & ACCESSORIES	0.20	0.21	0.21	0.21	0.22	0.22	1.25
27. CHEMICALS & PRODUCTS	0.69	0.70	0.71	0.72	0.72	0.73	1.00
28. PLASTICS & SYNTHETIC MATLS.	0.29	0.30	0.31	0.32	0.33	0.33	2.33

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
4. CIVIL ENGINEERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
31. PET REFINING & REL. PROD.	0.72	0.72	0.72	0.73	0.73	0.73	0.25
36. STONE & CLAY PRODUCTS	0.33	0.34	0.34	0.35	0.35	0.35	0.92
37. PRIMARY FERROUS METALS	0.49	0.50	0.52	0.52	0.52	0.51	0.86
38. NONFERROUS METALS	0.12	0.13	0.13	0.14	0.14	0.14	3.51
40. FAB. STRUCTURAL METAL PRODUCTS	1.02	1.01	1.03	1.06	1.08	1.09	1.39
42. OTHER FAB. METAL PRODUCTS	0.28	0.29	0.31	0.32	0.32	0.33	3.40
45. CONSTR. & MINING MACHINERY	0.58	0.62	0.65	0.67	0.69	0.70	3.65
46. MATERIALS HANDLING MACH. & EQ.	0.21	0.22	0.23	0.24	0.24	0.25	3.63
49. GENERAL INDUSTRY MACHINERY	0.23	0.24	0.25	0.26	0.26	0.27	2.64
56. RADIO,TV, & COMMUNICATION EQ.	0.58	0.60	0.62	0.63	0.64	0.65	2.09
57. ELECTRONIC COMPONENTS & ACCESS.	0.10	0.10	0.11	0.11	0.12	0.12	3.66
60. AIRCRAFT & PARTS	0.29	0.30	0.31	0.32	0.32	0.32	2.01
61. OTHER TRANSPORTATION EQ.	0.31	0.32	0.34	0.34	0.34	0.35	2.00
62. INSTRUMENTS & SUPPLIES	0.10	0.10	0.10	0.11	0.11	0.11	2.72
65. TRANSPORTATION & WAREHOUSING	1.85	1.86	1.87	1.88	1.86	1.82	-0.35
66. COMMUNICATION EXC. RADIO & TV	0.84	0.85	0.87	0.88	0.91	0.92	1.71
68. UTILITIES	2.33	2.34	2.35	2.36	2.37	2.38	0.41
69. WHOLESALE & RETAIL TRADE	2.00	2.07	2.14	2.19	2.24	2.28	2.65
71. REAL ESTATE & RENTAL	0.25	0.26	0.26	0.27	0.28	0.28	1.99
73. BUSINESS SERVICES	2.67	2.71	2.75	2.81	2.86	2.88	1.54
77. MISC. SERVICES	57.72	59.05	60.54	62.46	64.61	66.95	3.01
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	6.35	6.45	6.59	6.77	6.95	7.13	2.37
82. GOVERNMENT INDUSTRY	60.88	61.20	62.20	63.58	64.97	66.50	1.78
TOTAL, ALL INDUSTRIES	161.18	163.85	167.43	172.01	176.57	181.20	2.37

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
5. ELECTRICAL ENGINEERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
5. IRON ORE MINING	0.01	0.01	0.01	0.01	0.01	0.01	8.56
7. COAL MINING	0.01	0.01	0.01	0.01	0.02	0.02	9.21
8. CRUDE PETROLEUM & N. GAS	0.07	0.07	0.08	0.08	0.08	0.08	4.25
11. NEW CONSTRUCTION	0.25	0.29	0.31	0.34	0.36	0.38	8.62
13. ORDNANCE & ACCESSORIES	4.17	4.83	5.39	5.94	6.40	6.77	10.14
24. PAPER & ALLIED PRODUCTS	0.01	0.01	0.01	0.01	0.02	0.02	6.49
27. CHEMICALS & PRODUCTS	0.08	0.08	0.09	0.10	0.10	0.11	7.81
28. PLASTICS & SYNTHETIC MATLS.	0.02	0.02	0.02	0.02	0.02	0.02	8.71
31. PET REFINING & REL. PROD.	0.02	0.03	0.03	0.03	0.03	0.03	5.26
32. RUBBER & MISC. PLASTICS PROD.	0.01	0.01	0.02	0.02	0.02	0.02	10.08
36. STONE & CLAY PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	7.20
37. PRIMARY FERROUS METALS	0.04	0.05	0.05	0.06	0.06	0.06	7.20
38. NONFERROUS METALS	0.12	0.14	0.16	0.17	0.19	0.20	9.95
40. FAB. STRUCTURAL METAL PRODUCTS	0.02	0.02	0.02	0.03	0.03	0.03	7.57
42. OTHER FAB. METAL PRODUCTS	0.02	0.02	0.02	0.02	0.03	0.03	10.08
43. ENGINES & TURBINES	0.04	0.04	0.05	0.05	0.05	0.05	7.71
45. CONSTR. & MINING MACHINERY	0.01	0.01	0.01	0.01	0.01	0.01	7.25
46. MATERIALS HANDLING MACH. & EQ.	0.02	0.02	0.02	0.02	0.03	0.03	9.13
47. METALWORKING MACH. & EQ.	0.08	0.09	0.10	0.11	0.11	0.12	9.36
48. SPECIAL INDUSTRY MACHINERY	0.01	0.01	0.01	0.01	0.01	0.01	12.06
49. GENERAL INDUSTRY MACHINERY	0.05	0.06	0.06	0.07	0.07	0.08	7.51
50. MISC. NONELECTRICAL MACH.	0.03	0.03	0.03	0.04	0.04	0.04	7.53
51. OFFICE,COMPUTING & ACCT. MACH.	1.11	1.29	1.42	1.55	1.64	1.70	8.98
52. SERVICE INDUSTRY MACHINES	0.01	0.01	0.01	0.01	0.01	0.01	13.37
53. ELECTRICAL MACHINERY	0.36	0.41	0.45	0.50	0.54	0.57	9.88
55. ELECTRIC LIGHTING & WIRING EQ.	0.07	0.08	0.08	0.09	0.10	0.10	8.25
56. RADIO,TV, & COMMUNICATION EQ.	21.87	25.58	28.57	31.47	33.62	34.87	9.78
57. ELECTRONIC COMPONENTS & ACCESS.	4.31	5.23	6.00	6.82	7.56	8.05	13.28
58. MISC. ELECTRICAL MACH. & EQ.	0.04	0.05	0.06	0.06	0.07	0.07	9.57
59. MOTOR VEHICLES & EQUIPMENT	0.01	0.01	0.01	0.02	0.02	0.02	17.16
60. AIRCRAFT & PARTS	2.18	2.47	2.72	3.00	3.21	3.30	8.59
61. OTHER TRANSPORTATION EQ.	0.19	0.20	0.21	0.21	0.22	0.22	3.09
62. INSTRUMENTS & SUPPLIES	2.02	2.32	2.58	2.87	3.11	3.28	10.22
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.15	0.17	0.19	0.21	0.23	0.24	9.35
65. TRANSPORTATION & WAREHOUSING	0.04	0.04	0.04	0.04	0.05	0.05	4.83
66. COMMUNICATION EXC. RADIO & TV	0.54	0.59	0.64	0.71	0.78	0.81	8.69
67. RADIO & TV BROADCASTING	0.18	0.20	0.23	0.25	0.27	0.29	9.86

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
5. ELECTRICAL ENGINEERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
68. UTILITIES	0.34	0.39	0.43	0.47	0.51	0.53	9.11
69. WHOLESALE & RETAIL TRADE	0.08	0.09	0.10	0.11	0.12	0.13	9.75
72. PERSONAL SERVICES EXC. AUTO.	0.01	0.02	0.02	0.02	0.02	0.02	9.67
73. BUSINESS SERVICES	1.07	1.23	1.39	1.57	1.72	1.82	11.26
77. MISC. SERVICES	0.20	0.20	0.22	0.23	0.25	0.26	5.51
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.77	0.82	0.87	0.92	0.96	0.98	4.85
82. GOVERNMENT INDUSTRY	16.04	15.72	16.02	16.45	16.72	16.83	0.96
TOTAL, ALL INDUSTRIES	56.73	63.04	68.80	74.83	79.48	82.34	7.74
TOTAL EMPLOYMENT							
5. IRON ORE MINING	0.14	0.15	0.16	0.16	0.16	0.15	2.36
7. COAL MINING	0.39	0.41	0.43	0.44	0.45	0.46	3.50
8. CRUDE PETROLEUM & N. GAS	0.94	0.93	0.93	0.92	0.90	0.91	-0.54
11. NEW CONSTRUCTION	6.72	6.86	7.00	7.22	7.39	7.49	2.20
13. ORDNANCE & ACCESSORIES	6.91	7.23	7.52	7.86	8.12	8.36	3.91
24. PAPER & ALLIED PRODUCTS	0.61	0.63	0.63	0.63	0.63	0.63	0.66
27. CHEMICALS & PRODUCTS	1.57	1.60	1.63	1.64	1.66	1.67	1.28
28. PLASTICS & SYNTHETIC MATLS.	0.68	0.71	0.73	0.75	0.76	0.76	2.32
31. PET REFINING & REL. PROD.	0.46	0.46	0.46	0.46	0.47	0.47	0.33
32. RUBBER & MISC. PLASTICS PROD.	0.49	0.50	0.52	0.54	0.55	0.56	2.67
36. STONE & CLAY PRODUCTS	0.22	0.22	0.22	0.22	0.22	0.22	0.04
37. PRIMARY FERROUS METALS	0.63	0.64	0.66	0.66	0.66	0.66	0.87
38. NONFERROUS METALS	1.45	1.52	1.59	1.64	1.68	1.71	3.32
40. FAB. STRUCTURAL METAL PRODUCTS	0.45	0.45	0.46	0.47	0.48	0.49	1.84
42. OTHER FAB. METAL PRODUCTS	0.37	0.39	0.41	0.42	0.43	0.44	3.36
43. ENGINES & TURBINES	0.44	0.45	0.47	0.48	0.48	0.48	1.77
45. CONSTR. & MINING MACHINERY	0.86	0.91	0.95	0.99	1.01	1.02	3.65
46. MATERIALS HANDLING MACH. & EQ.	0.31	0.32	0.34	0.35	0.36	0.37	3.63
47. METALWORKING MACH. & EQ.	1.48	1.54	1.63	1.69	1.74	1.77	3.76
48. SPECIAL INDUSTRY MACHINERY	0.88	0.90	0.94	0.99	1.01	1.03	3.22
49. GENERAL INDUSTRY MACHINERY	1.20	1.23	1.29	1.33	1.35	1.37	2.62
50. MISC. NONELECTRICAL MACH.	0.24	0.25	0.26	0.27	0.27	0.27	2.22
51. OFFICE,COMPUTING & ACCT. MACH.	29.39	31.11	32.96	34.07	35.04	36.30	4.31
52. SERVICE INDUSTRY MACHINES	0.41	0.42	0.44	0.45	0.45	0.45	2.10
53. ELECTRICAL MACHINERY	7.17	7.36	7.74	7.98	8.12	8.23	2.77
55. ELECTRIC LIGHTING & WIRING EQ.	1.46	1.47	1.51	1.55	1.57	1.59	1.70
56. RADIO,TV, & COMMUNICATION EQ.	51.79	53.90	56.49	58.36	59.76	61.61	3.53
57. ELECTRONIC COMPONENTS & ACCESS.	19.69	20.92	22.36	23.66	24.74	25.64	5.43

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
5. ELECTRICAL ENGINEERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
58. MISC. ELECTRICAL MACH. & EQ.	1.62	1.68	1.75	1.77	1.79	1.80	2.12
59. MOTOR VEHICLES & EQUIPMENT	0.52	0.54	0.56	0.57	0.58	0.58	2.24
60. AIRCRAFT & PARTS	4.37	4.55	4.67	4.82	4.83	4.83	1.99
61. OTHER TRANSPORTATION EQ.	0.67	0.68	0.71	0.72	0.72	0.72	1.68
62. INSTRUMENTS & SUPPLIES	17.32	17.97	19.04	20.14	21.04	21.74	4.66
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	3.56	3.64	3.83	4.03	4.19	4.33	3.95
65. TRANSPORTATION & WAREHOUSING	0.87	0.89	0.91	0.94	0.95	0.95	1.90
66. COMMUNICATION EXC. RADIO & TV	21.60	22.57	23.92	24.97	26.35	27.39	4.87
67. RADIO & TV BROADCASTING	9.02	9.46	9.88	10.17	10.39	10.62	3.32
68. UTILITIES	16.01	16.54	17.05	17.55	18.07	18.55	2.99
69. WHOLESALE & RETAIL TRADE	13.20	13.65	14.09	14.47	14.77	15.08	2.70
72. PERSONAL SERVICES EXC. AUTO.	0.73	0.75	0.77	0.80	0.82	0.85	3.06
73. BUSINESS SERVICES	22.00	23.34	24.77	26.35	27.80	29.07	5.73
77. MISC. SERVICES	30.32	31.19	32.14	33.33	34.63	36.05	3.52
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	4.28	4.43	4.62	4.79	4.94	5.08	3.51
82. GOVERNMENT INDUSTRY	42.85	42.76	43.17	43.95	44.72	45.35	1.14
TOTAL, ALL INDUSTRIES	329.40	341.31	355.89	368.89	380.40	391.48	3.51

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
6. INDUSTRIAL ENGINEERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
6. NONFERROUS METAL MINING	0.02	0.02	0.02	0.02	0.03	0.03	10.91
7. COAL MINING	0.03	0.04	0.04	0.05	0.05	0.06	11.38
8. CRUDE PETROLEUM & N. GAS	0.06	0.06	0.07	0.07	0.08	0.08	6.12
11. NEW CONSTRUCTION	0.12	0.13	0.15	0.16	0.18	0.19	10.13
13. ORDNANCE & ACCESSORIES	1.58	1.81	1.99	2.17	2.31	2.42	8.85
16. FABRIC,YARN & THREAD MILLS	0.01	0.01	0.02	0.02	0.02	0.02	4.74
18. APPAREL	0.01	0.01	0.01	0.01	0.01	0.01	6.15
19. MISC. FABRICATED TEXTILE PROD.	0.01	0.01	0.01	0.01	0.01	0.01	4.68
20. LUMBER & WOOD PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	10.24
23. OTHER FURNITURE & FIXTURES	0.01	0.01	0.01	0.01	0.01	0.01	4.62
24. PAPER & ALLIED PRODUCTS	0.02	0.02	0.02	0.02	0.02	0.02	6.79
25. PAPERBOARD CONTAINERS & BOXES	0.01	0.01	0.01	0.01	0.01	0.01	8.78
26. PRINTING & PUBLISHING	0.01	0.01	0.01	0.01	0.01	0.01	5.83
27. CHEMICALS & PRODUCTS	0.08	0.09	0.09	0.10	0.11	0.11	7.63
28. PLASTICS & SYNTHETIC MATLS.	0.02	0.02	0.02	0.03	0.03	0.03	8.72
31. PET REFINING & REL. PROD.	0.03	0.03	0.04	0.04	0.04	0.04	5.24
32. RUBBER & MISC. PLASTICS PROD.	0.05	0.05	0.06	0.06	0.07	0.08	10.26
35. GLASS & GLASS PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	9.34
36. STONE & CLAY PRODUCTS	0.02	0.03	0.03	0.03	0.03	0.04	8.07
37. PRIMARY FERROUS METALS	0.16	0.18	0.20	0.22	0.24	0.25	9.76
38. NONFERROUS METALS	0.11	0.12	0.14	0.15	0.16	0.17	9.46
40. FAB. STRUCTURAL METAL PRODUCTS	0.08	0.09	0.10	0.11	0.12	0.13	9.80
41. SCREW MACHINE PROD.&STAMPINGS	0.06	0.06	0.07	0.07	0.08	0.08	7.71
42. OTHER FAB. METAL PRODUCTS	0.05	0.05	0.06	0.06	0.07	0.07	10.03
43. ENGINES & TURBINES	0.06	0.07	0.08	0.08	0.09	0.09	7.72
45. CONSTR. & MINING MACHINERY	0.02	0.02	0.03	0.03	0.03	0.03	10.18
46. MATERIALS HANDLING MACH. & EQ.	0.04	0.04	0.05	0.05	0.06	0.06	12.11
47. METALWORKING MACH. & EQ.	0.10	0.11	0.13	0.15	0.16	0.17	12.65
48. SPECIAL INDUSTRY MACHINERY	0.01	0.01	0.01	0.01	0.01	0.01	12.06
49. GENERAL INDUSTRY MACHINERY	0.09	0.10	0.11	0.12	0.13	0.13	8.98
50. MISC. NONELECTRICAL MACH	0.12	0.14	0.15	0.17	0.19	0.19	9.60
51. OFFICE,COMPUTING & ACCT. MACH.	0.22	0.25	0.28	0.30	0.32	0.33	8.76
52. SERVICE INDUSTRY MACHINES	0.01	0.02	0.02	0.02	0.02	0.03	13.37
53. ELECTRICAL MACHINERY	0.09	0.11	0.12	0.13	0.14	0.15	10.62
55. ELECTRIC LIGHTING & WIRING EQ.	0.04	0.05	0.05	0.06	0.06	0.06	8.25
56. RADIO,TV, & COMMUNICATION EQ.	1.65	1.92	2.14	2.36	2.51	2.60	9.54
57. ELECTRONIC COMPONENTS & ACCESS.	0.55	0.67	0.77	0.88	0.97	1.03	13.29

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
6. INDUSTRIAL ENGINEERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
58. MISC. ELECTRICAL MACH. & EQ.	0.03	0.03	0.03	0.04	0.04	0.04	9.58
59. MOTOR VEHICLES & EQUIPMENT	0.09	0.10	0.12	0.14	0.16	0.19	17.65
60. AIRCRAFT & PARTS	2.42	2.78	3.10	3.46	3.74	3.88	9.87
61. OTHER TRANSPORTATION EQ.	0.19	0.20	0.20	0.21	0.21	0.22	3.22
62. INSTRUMENTS & SUPPLIES	0.26	0.29	0.32	0.35	0.37	0.38	8.25
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.02	0.02	0.02	0.02	0.03	0.03	8.52
64. MISC. MANUFACTURING	0.01	0.01	0.01	0.01	0.01	0.01	6.44
65. TRANSPORTATION & WAREHOUSING	0.04	0.04	0.05	0.05	0.05	0.05	4.50
66. COMMUNICATION EXC. RADIO & TV	0.07	0.07	0.07	0.08	0.08	0.09	5.42
68. UTILITIES	0.03	0.04	0.04	0.04	0.04	0.05	5.95
69. WHOLESALE & RETAIL TRADE	0.05	0.05	0.06	0.07	0.07	0.08	9.47
70. FINANCE & INSURANCE	0.03	0.03	0.04	0.04	0.04	0.05	8.92
73. BUSINESS SERVICES	0.18	0.20	0.22	0.24	0.25	0.26	7.42
77. MISC. SERVICES	0.04	0.04	0.04	0.05	0.05	0.05	4.26
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.64	0.69	0.73	0.78	0.81	0.83	5.35
82. GOVERNMENT INDUSTRY	1.83	1.79	1.83	1.88	1.92	1.93	1.13
TOTAL, ALL INDUSTRIES	11.51	12.85	14.04	15.34	16.36	17.00	8.12

TOTAL EMPLOYMENT

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
6. NONFERROUS METAL MINING	0.28	0.30	0.31	0.31	0.31	0.31	2.33
7. COAL MINING	1.17	1.26	1.34	1.40	1.48	1.54	5.56
8. CRUDE PETROLEUM & N. GAS	0.79	0.81	0.82	0.82	0.82	0.84	1.25
11. NEW CONSTRUCTION	3.12	3.24	3.35	3.51	3.64	3.73	3.62
13. ORDNANCE & ACCESSORIES	2.62	2.71	2.78	2.87	2.94	2.99	2.70
16. FABRIC,YARN & THREAD MILLS	1.09	1.12	1.15	1.16	1.17	1.17	1.36
18. APPAREL	1.92	1.94	1.99	2.03	2.03	2.03	1.11
19. MISC. FABRICATED TEXTILE PROD.	0.34	0.35	0.35	0.36	0.37	0.37	1.85
20. LUMBER & WOOD PRODUCTS	0.40	0.44	0.46	0.48	0.49	0.49	4.36
23. OTHER FURNITURE & FIXTURES	0.60	0.61	0.63	0.65	0.66	0.67	2.20
24. PAPER & ALLIED PRODUCTS	0.90	0.93	0.94	0.95	0.95	0.95	0.95
25. PAPERBOARD CONTAINERS & BOXES	0.34	0.35	0.36	0.37	0.37	0.37	1.71
26. PRINTING & PUBLISHING	0.56	0.56	0.57	0.57	0.57	0.57	0.23
27. CHEMICALS & PRODUCTS	1.65	1.68	1.71	1.72	1.73	1.74	1.11
28. PLASTICS & SYNTHETIC MATLS.	0.82	0.85	0.88	0.90	0.91	0.91	2.32
31. PET REFINING & REL. PROD.	0.60	0.60	0.60	0.61	0.61	0.61	0.30
32. RUBBER & MISC. PLASTICS PROD.	1.69	1.75	1.82	1.88	1.93	1.95	2.83
35. GLASS & GLASS PRODUCTS	0.33	0.33	0.34	0.34	0.34	0.34	0.63
36. STONE & CLAY PRODUCTS	0.74	0.75	0.77	0.78	0.78	0.77	0.85

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
6. INDUSTRIAL ENGINEERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
37. PRIMARY FERROUS METALS	2.20	2.32	2.43	2.51	2.56	2.59	3.27
38. NONFERROUS METALS	1.28	1.33	1.39	1.43	1.45	1.47	2.86
40. FAB. STRUCTURAL METAL PRODUCTS	1.79	1.84	1.92	2.03	2.11	2.17	3.95
41. SCREW MACHINE PROD.&STAMPINGS	0.90	0.94	0.97	0.99	1.00	1.00	2.18
42. OTHER FAB. METAL PRODUCTS	1.00	1.04	1.08	1.12	1.15	1.18	3.31
43. ENGINES & TURBINES	0.76	0.79	0.82	0.83	0.83	0.83	1.78
45. CONSTR. & MINING MACHINERY	1.74	1.89	2.05	2.18	2.30	2.38	6.48
46. MATERIALS HANDLING MACH. & EQ.	0.62	0.66	0.72	0.77	0.81	0.85	6.46
47. METALWORKING MACH. & EQ.	1.86	2.00	2.19	2.35	2.48	2.60	6.88
48. SPECIAL INDUSTRY MACHINERY	0.82	0.84	0.88	0.92	0.94	0.96	3.22
49. GENERAL INDUSTRY MACHINERY	1.98	2.06	2.19	2.28	2.34	2.41	4.02
50. MISC. NONELECTRICAL MACH.	1.07	1.12	1.20	1.25	1.28	1.32	4.19
51. OFFICE,COMPUTING & ACCT. MACH.	5.77	6.09	6.44	6.65	6.82	7.06	4.10
52. SERVICE INDUSTRY MACHINES	0.82	0.85	0.89	0.90	0.91	0.91	2.10
53. ELECTRICAL MACHINERY	1.85	1.91	2.03	2.10	2.15	2.20	3.47
55. ELECTRIC LIGHTING & WIRING EQ.	0.89	0.90	0.92	0.94	0.96	0.97	1.71
56. RADIO,TV, & COMMUNICATION EQ.	3.90	4.05	4.24	4.37	4.46	4.59	3.31
57. ELECTRONIC COMPONENTS & ACCESS.	2.53	2.69	2.87	3.04	3.18	3.30	5.44
58. MISC. ELECTRICAL MACH. & EQ.	0.96	1.00	1.04	1.05	1.06	1.07	2.13
59. MOTOR VEHICLES & EQUIPMENT	4.40	4.62	4.80	4.90	4.97	5.02	2.67
60. AIRCRAFT & PARTS	4.86	5.11	5.32	5.55	5.62	5.68	3.19
61. OTHER TRANSPORTATION EQ.	0.65	0.66	0.69	0.70	0.70	0.71	1.81
62. INSTRUMENTS & SUPPLIES	2.22	2.26	2.34	2.44	2.50	2.54	2.78
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.43	0.44	0.46	0.48	0.49	0.51	3.16
64. MISC. MANUFACTURING	0.96	0.98	1.01	1.05	1.07	1.08	2.39
65. TRANSPORTATION & WAREHOUSING	0.97	1.00	1.02	1.05	1.05	1.05	1.58
66. COMMUNICATION EXC. RADIO & TV	2.66	2.69	2.76	2.79	2.86	2.90	1.71
68. UTILITIES	1.58	1.58	1.58	1.58	1.58	1.58	0.01
69. WHOLESALE & RETAIL TRADE	7.83	8.07	8.31	8.51	8.67	8.83	2.43
70. FINANCE & INSURANCE	3.57	3.61	3.67	3.75	3.83	3.91	1.86
73. BUSINESS SERVICES	3.78	3.85	3.94	4.05	4.13	4.19	2.09
77. MISC. SERVICES	6.19	6.28	6.39	6.55	6.73	6.93	2.30
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	5.62	5.80	6.01	6.19	6.32	6.43	2.74
82. GOVERNMENT INDUSTRY	5.91	5.89	5.94	6.03	6.12	6.21	0.97
TOTAL, ALL INDUSTRIES	109.37	112.87	116.93	120.36	122.96	125.22	2.74

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
7. MECHANICAL ENGINEERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
6. NONFERROUS METAL MINING	0.01	0.01	0.01	0.01	0.01	0.01	11.14
8. CRUDE PETROLEUM & N. GAS	0.03	0.04	0.04	0.04	0.04	0.04	4.54
11. NEW CONSTRUCTION	0.43	0.49	0.53	0.58	0.63	0.66	8.79
13. ORDNANCE & ACCESSORIES	3.16	3.61	3.97	4.33	4.60	4.82	8.77
16. FABRIC,YARN & THREAD MILLS	0.01	0.01	0.01	0.01	0.01	0.01	5.63
20. LUMBER & WOOD PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	9.92
24. PAPER & ALLIED PRODUCTS	0.04	0.04	0.05	0.05	0.05	0.05	6.52
25. PAPERBOARD CONTAINERS & BOXES	0.01	0.01	0.01	0.01	0.01	0.01	8.77
27. CHEMICALS & PRODUCTS	0.19	0.21	0.22	0.24	0.26	0.27	7.69
28. PLASTICS & SYNTHETIC MATLS.	0.05	0.05	0.06	0.06	0.07	0.07	8.70
31. PET REFINING & REL. PROD.	0.07	0.08	0.08	0.09	0.09	0.10	5.23
32. RUBBER & MISC. PLASTICS PROD.	0.08	0.10	0.11	0.12	0.13	0.14	10.25
35. GLASS & GLASS PRODUCTS	0.01	0.01	0.02	0.02	0.02	0.02	8.92
36. STONE & CLAY PRODUCTS	0.03	0.03	0.04	0.04	0.04	0.04	8.08
37. PRIMARY FERROUS METALS	0.12	0.13	0.14	0.15	0.16	0.17	7.65
38. NONFERROUS METALS	0.18	0.20	0.23	0.25	0.27	0.28	9.72
39. METAL CONTAINERS	0.01	0.01	0.01	0.01	0.01	0.01	6.60
40. FAB. STRUCTURAL METAL PRODUCTS	0.31	0.35	0.38	0.41	0.43	0.45	7.64
41. SCREW MACHINE PROD.&STAMPINGS	0.09	0.10	0.11	0.12	0.13	0.14	7.72
42. OTHER FAB. METAL PRODUCTS	0.14	0.16	0.18	0.20	0.21	0.23	9.94
43. ENGINES & TURBINES	0.26	0.30	0.34	0.37	0.40	0.43	10.90
44. FARM & GARDEN MACHINERY	0.01	0.01	0.01	0.01	0.01	0.01	11.89
45. CONSTR. & MINING MACHINERY	0.06	0.07	0.08	0.08	0.09	0.10	10.19
46. MATERIALS HANDLING MACH. & EQ.	0.10	0.12	0.14	0.15	0.17	0.18	12.12
47. METALWORKING MACH. & EQ.	0.33	0.39	0.44	0.50	0.55	0.59	12.57
48. SPECIAL INDUSTRY MACHINERY	0.02	0.02	0.03	0.03	0.04	0.04	15.22
49. GENERAL INDUSTRY MACHINERY	0.25	0.29	0.32	0.35	0.38	0.41	10.51
50. MISC. NONELECTRICAL MACH.	0.15	0.17	0.18	0.20	0.21	0.22	7.53
51. OFFICE,COMPUTING & ACCT. MACH.	0.15	0.17	0.20	0.22	0.23	0.24	10.41
52. SERVICE INDUSTRY MACHINES	0.03	0.03	0.03	0.04	0.05	0.06	17.23
53. ELECTRICAL MACHINERY	0.12	0.13	0.14	0.16	0.17	0.18	9.17
55. ELECTRIC LIGHTING & WIRING EQ.	0.05	0.06	0.06	0.07	0.07	0.07	8.25
56. RADIO,TV, & COMMUNICATION EQ.	3.04	3.60	4.07	4.54	4.90	5.13	11.04
57. ELECTRONIC COMPONENTS & ACCESS.	0.52	0.64	0.74	0.85	0.95	1.02	14.46
58. MISC. ELECTRICAL MACH. & EQ.	0.03	0.03	0.03	0.04	0.04	0.04	9.56
59. MOTOR VEHICLES & EQUIPMENT	0.09	0.10	0.12	0.14	0.16	0.19	17.14
60. AIRCRAFT & PARTS	4.85	5.61	6.31	7.11	7.76	8.13	10.90

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
7. MECHANICAL ENGINEERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
61. OTHER TRANSPORTATION EQ.	0.45	0.48	0.49	0.50	0.52	0.53	3.25
62. INSTRUMENTS & SUPPLIES	0.53	0.60	0.66	0.72	0.76	0.79	8.10
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.09	0.10	0.11	0.12	0.13	0.13	8.61
64. MISC. MANUFACTURING	0.01	0.01	0.01	0.01	0.01	0.01	7.18
65. TRANSPORTATION & WAREHOUSING	0.09	0.09	0.10	0.10	0.11	0.11	4.38
66. COMMUNICATION EXC. RADIO & TV	0.04	0.05	0.05	0.05	0.06	0.06	5.38
68. UTILITIES	0.11	0.12	0.13	0.14	0.15	0.15	6.05
69. WHOLESALE & RETAIL TRADE	0.07	0.08	0.08	0.09	0.10	0.10	9.55
72. PERSONAL SERVICES EXC. AUTO.	0.01	0.01	0.01	0.01	0.02	0.02	9.35
73. BUSINESS SERVICES	0.44	0.49	0.53	0.57	0.60	0.62	6.84
77. MISC. SERVICES	0.20	0.21	0.22	0.24	0.26	0.27	5.86
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.56	0.60	0.64	0.67	0.70	0.71	4.88
82. GOVERNMENT INDUSTRY	7.40	7.25	7.39	7.59	7.72	7.77	0.98
TOTAL, ALL INDUSTRIES	25.09	27.54	29.90	32.51	34.59	35.93	7.45
TOTAL EMPLOYMENT							
6. NONFERROUS METAL MINING	0.14	0.15	0.15	0.16	0.16	0.16	2.55
8. CRUDE PETROLEUM & N. GAS	0.47	0.47	0.47	0.47	0.46	0.47	-0.26
11. NEW CONSTRUCTION	11.52	11.77	12.03	12.42	12.74	12.93	2.35
13. ORDNANCE & ACCESSORIES	5.23	5.40	5.55	5.72	5.85	5.95	2.61
16. FABRIC,YARN & THREAD MILLS	0.52	0.54	0.55	0.57	0.58	0.58	2.21
20. LUMBER & WOOD PRODUCTS	0.31	0.34	0.35	0.37	0.38	0.38	4.05
24. PAPER & ALLIED PRODUCTS	2.08	2.14	2.16	2.16	2.16	2.15	0.69
25. PAPERBOARD CONTAINERS & BOXES	0.27	0.28	0.29	0.29	0.29	0.30	1.71
27. CHEMICALS & PRODUCTS	3.92	4.00	4.06	4.11	4.13	4.16	1.17
28. PLASTICS & SYNTHETIC MATLS.	1.88	1.95	2.02	2.07	2.10	2.11	2.31
31. PET REFINING & REL. PROD.	1.37	1.37	1.38	1.39	1.39	1.39	0.29
32. RUBBER & MISC. PLASTICS PROD.	3.10	3.20	3.33	3.44	3.53	3.56	2.83
35. GLASS & GLASS PRODUCTS	0.57	0.58	0.59	0.59	0.58	0.58	0.25
36. STONE & CLAY PRODUCTS	0.90	0.92	0.93	0.95	0.95	0.94	0.86
37. PRIMARY FERROUS METALS	1.62	1.67	1.72	1.74	1.74	1.73	1.29
38. NONFERROUS METALS	2.10	2.19	2.28	2.36	2.41	2.45	3.10
39. METAL CONTAINERS	0.45	0.44	0.44	0.45	0.45	0.46	0.35
40. FAB. STRUCTURAL METAL PRODUCTS	7.04	7.06	7.23	7.48	7.64	7.74	1.90
41. SCREW MACHINE PROD.&STAMPINGS	1.52	1.60	1.65	1.68	1.69	1.70	2.19
42. OTHER FAB. METAL PRODUCTS	3.07	3.17	3.32	3.43	3.51	3.60	3.23
43. ENGINES & TURBINES	3.10	3.31	3.54	3.68	3.80	3.92	4.78
44. FARM & GARDEN MACHINERY	1.91	2.04	2.23	2.34	2.44	2.54	5.85

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
7. MECHANICAL ENGINEERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
45. CONSTR. & MINING MACHINERY	5.02	5.48	5.94	6.32	6.65	6.88	6.49
46. MATERIALS HANDLING MACH. & EQ.	1.80	1.91	2.09	2.23	2.35	2.46	6.47
47. METALWORKING MACH. & EQ.	6.36	6.84	7.47	8.00	8.46	8.84	6.81
48. SPECIAL INDUSTRY MACHINERY	2.80	2.95	3.19	3.43	3.61	3.78	6.13
49. GENERAL INDUSTRY MACHINERY	5.63	5.95	6.42	6.77	7.06	7.35	5.48
50. MISC. NONELECTRICAL MACH.	1.33	1.37	1.43	1.46	1.47	1.49	2.23
51. OFFICE,COMPUTING & ACCT. MACH.	3.91	4.21	4.52	4.74	4.93	5.16	5.68
52. SERVICE INDUSTRY MACHINES	1.39	1.51	1.64	1.72	1.78	1.83	5.59
53. ELECTRICAL MACHINERY	2.32	2.36	2.47	2.52	2.55	2.57	2.11
55. ELECTRIC LIGHTING & WIRING EQ.	1.04	1.05	1.08	1.10	1.12	1.13	1.70
56. RADIO,TV, & COMMUNICATION EQ.	7.20	7.59	8.05	8.41	8.71	9.07	4.72
57. ELECTRONIC COMPONENTS & ACCESS.	2.38	2.56	2.76	2.95	3.12	3.26	6.52
58. MISC. ELECTRICAL MACH. & EQ.	0.95	0.98	1.02	1.04	1.05	1.06	2.11
59. MOTOR VEHICLES & EQUIPMENT	4.40	4.60	4.75	4.83	4.88	4.91	2.23
60. AIRCRAFT & PARTS	9.71	10.33	10.84	11.42	11.68	11.90	4.16
61. OTHER TRANSPORTATION EQ.	1.57	1.61	1.67	1.70	1.71	1.72	1.84
62. INSTRUMENTS & SUPPLIES	4.59	4.67	4.85	5.03	5.15	5.23	2.64
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	2.05	2.08	2.17	2.27	2.35	2.41	3.25
64. MISC. MANUFACTURING	0.82	0.84	0.87	0.91	0.93	0.95	3.10
65. TRANSPORTATION & WAREHOUSING	2.10	2.15	2.19	2.25	2.26	2.26	1.46
66. COMMUNICATION EXC. RADIO & TV	1.76	1.78	1.83	1.85	1.90	1.92	1.67
68. UTILITIES	5.20	5.20	5.21	5.21	5.22	5.22	0.10
69. WHOLESALE & RETAIL TRADE	10.83	11.18	11.52	11.81	12.03	12.27	2.52
72. PERSONAL SERVICES EXC. AUTO.	0.57	0.58	0.60	0.61	0.63	0.65	2.76
73. BUSINESS SERVICES	9.13	9.25	9.40	9.61	9.76	9.85	1.54
77. MISC. SERVICES	31.08	32.10	33.20	34.53	36.00	37.58	3.87
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	4.29	4.43	4.60	4.76	4.89	5.00	3.15
82. GOVERNMENT INDUSTRY	18.04	18.01	18.19	18.52	18.84	19.11	1.15
TOTAL, ALL INDUSTRIES	207.28	214.17	222.40	230.14	236.40	242.00	3.15

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
8. METALLURGICAL ENGINEERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
6. NONFERROUS METAL MINING	0.02	0.02	0.02	0.02	0.03	0.03	10.94
8. CRUDE PETROLEUM & N. GAS	0.01	0.01	0.01	0.01	0.01	0.01	4.56
11. NEW CONSTRUCTION	0.01	0.02	0.02	0.02	0.02	0.02	8.40
13. ORDNANCE & ACCESSORIES	0.11	0.12	0.13	0.14	0.15	0.16	7.94
27. CHEMICALS & PRODUCTS	0.01	0.01	0.01	0.02	0.02	0.02	7.63
31. PET REFINING & REL. PROD.	0.01	0.01	0.01	0.01	0.01	0.01	5.23
37. PRIMARY FERROUS METALS	0.16	0.18	0.20	0.22	0.24	0.26	10.50
38. NONFERROUS METALS	0.10	0.12	0.13	0.14	0.15	0.16	9.83
40. FAB. STRUCTURAL METAL PRODUCTS	0.01	0.01	0.01	0.02	0.02	0.02	7.55
41. SCREW MACHINE PROD.&STAMPINGS	0.01	0.02	0.02	0.02	0.02	0.02	7.69
42. OTHER FAB. METAL PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	9.93
43. ENGINES & TURBINES	0.02	0.03	0.03	0.03	0.03	0.03	7.70
47. METALWORKING MACH. & EQ.	0.01	0.01	0.01	0.01	0.01	0.01	9.38
49. GENERAL INDUSTRY MACHINERY	0.01	0.02	0.02	0.02	0.02	0.02	7.50
56. RADIO,TV, & COMMUNICATION EQ.	0.11	0.12	0.13	0.15	0.15	0.16	8.31
57. ELECTRONIC COMPONENTS & ACCESS.	0.04	0.04	0.05	0.05	0.06	0.06	11.34
60. AIRCRAFT & PARTS	0.60	0.71	0.82	0.94	1.04	1.11	13.06
61. OTHER TRANSPORTATION EQ.	0.02	0.02	0.02	0.02	0.02	0.02	3.12
62. INSTRUMENTS & SUPPLIES	0.02	0.02	0.02	0.02	0.03	0.03	8.43
68. UTILITIES	0.01	0.01	0.01	0.01	0.01	0.01	6.28
73. BUSINESS SERVICES	0.07	0.08	0.09	0.11	0.12	0.13	12.14
77. MISC. SERVICES	0.01	0.01	0.01	0.01	0.01	0.01	4.15
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.03	0.03	0.03	0.04	0.04	0.04	5.71
82. GOVERNMENT INDUSTRY	0.51	0.50	0.51	0.52	0.53	0.54	1.01
TOTAL, ALL INDUSTRIES	1.95	2.16	2.37	2.61	2.81	2.94	8.59
TOTAL EMPLOYMENT							
6. NONFERROUS METAL MINING	0.28	0.30	0.31	0.32	0.31	0.32	2.36
8. CRUDE PETROLEUM & N. GAS	0.09	0.09	0.09	0.09	0.09	0.09	-0.24
11. NEW CONSTRUCTION	0.37	0.37	0.38	0.39	0.40	0.41	1.99
13. ORDNANCE & ACCESSORIES	0.18	0.18	0.18	0.19	0.19	0.19	1.84
27. CHEMICALS & PRODUCTS	0.26	0.27	0.27	0.27	0.28	0.28	1.11
31. PET REFINING & REL. PROD.	0.18	0.18	0.18	0.18	0.18	0.18	0.29
37. PRIMARY FERROUS METALS	2.18	2.31	2.45	2.54	2.60	2.65	3.97
38. NONFERROUS METALS	1.20	1.25	1.31	1.35	1.38	1.41	3.21
40. FAB. STRUCTURAL METAL PRODUCTS	0.27	0.27	0.28	0.29	0.29	0.29	1.82

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
8. METALLURGICAL ENGINEERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
41. SCREW MACHINE PROD.&STAMPINGS	0.22	0.23	0.24	0.24	0.24	0.24	2.16
42. OTHER FAB. METAL PRODUCTS	0.14	0.15	0.15	0.16	0.16	0.17	3.22
43. ENGINES & TURBINES	0.29	0.30	0.31	0.31	0.31	0.31	1.76
47. METALWORKING MACH. & EQ.	0.16	0.17	0.18	0.18	0.19	0.19	3.78
49. GENERAL INDUSTRY MACHINERY	0.34	0.35	0.37	0.38	0.38	0.39	2.61
56. RADIO,TV, & COMMUNICATION EQ.	0.25	0.26	0.27	0.27	0.27	0.28	2.15
57. ELECTRONIC COMPONENTS & ACCESS.	0.16	0.17	0.18	0.19	0.19	0.20	3.62
60. AIRCRAFT & PARTS	1.20	1.31	1.40	1.50	1.57	1.62	6.19
61. OTHER TRANSPORTATION EQ.	0.07	0.08	0.08	0.08	0.08	0.08	1.72
62. INSTRUMENTS & SUPPLIES	0.15	0.16	0.16	0.17	0.18	0.18	2.96
68. UTILITIES	0.27	0.27	0.27	0.28	0.28	0.28	0.32
73. BUSINESS SERVICES	1.47	1.58	1.69	1.81	1.92	2.02	6.57
77. MISC. SERVICES	1.24	1.26	1.28	1.31	1.34	1.38	2.20
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.20	0.21	0.22	0.22	0.23	0.23	3.26
82. GOVERNMENT INDUSTRY	1.60	1.60	1.61	1.65	1.68	1.70	1.22
TOTAL, ALL INDUSTRIES	14.58	15.15	15.77	16.33	16.75	17.11	3.26

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
9. MINING ENGINEERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
5. IRON ORE MINING	0.02	0.02	0.02	0.02	0.02	0.02	8.25
6. NONFERROUS METAL MINING	0.03	0.04	0.04	0.05	0.05	0.05	10.61
7. COAL MINING	0.05	0.05	0.06	0.07	0.08	0.08	12.24
8. CRUDE PETROLEUM & N. GAS	0.02	0.02	0.02	0.02	0.02	0.02	4.64
9. STONE&CLAY MINING & QUARRYING	0.01	0.01	0.01	0.01	0.01	0.01	9.96
11. NEW CONSTRUCTION	0.01	0.01	0.01	0.01	0.01	0.01	8.34
38. NONFERROUS METALS	0.01	0.01	0.01	0.01	0.01	0.01	9.44
60. AIRCRAFT & PARTS	0.01	0.01	0.01	0.01	0.01	0.01	7.98
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.03	0.04	0.04	0.04	0.04	0.04	5.75
TOTAL, ALL INDUSTRIES	0.20	0.22	0.24	0.27	0.29	0.30	8.97
TOTAL EMPLOYMENT							
5. IRON ORE MINING	0.32	0.34	0.36	0.36	0.36	0.35	2.06
6. NONFERROUS METAL MINING	0.57	0.60	0.62	0.63	0.63	0.63	2.06
7. COAL MINING	1.64	1.79	1.92	2.02	2.14	2.24	6.38
8. CRUDE PETROLEUM & N. GAS	0.23	0.23	0.23	0.22	0.22	0.23	-0.17
9. STONE&CLAY MINING & QUARRYING	0.26	0.27	0.28	0.29	0.29	0.30	2.56
11. NEW CONSTRUCTION	0.17	0.17	0.17	0.18	0.18	0.19	1.94
38. NONFERROUS METALS	0.11	0.11	0.12	0.12	0.12	0.12	2.84
60. AIRCRAFT & PARTS	0.02	0.02	0.02	0.02	0.02	0.02	1.42
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.60	0.63	0.65	0.67	0.69	0.71	3.16
TOTAL, ALL INDUSTRIES	6.03	6.29	6.53	6.73	6.90	7.04	3.16

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
10. PETROLEUM ENGINEERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
8. CRUDE PETROLEUM & N. GAS	0.55	0.62	0.67	0.74	0.80	0.84	8.89
13. ORDNANCE & ACCESSORIES	0.02	0.02	0.02	0.02	0.02	0.02	8.18
31. PET REFINING & REL. PROD.	0.03	0.04	0.04	0.04	0.05	0.05	7.10
60. AIRCRAFT & PARTS	0.02	0.02	0.03	0.03	0.03	0.03	8.62
73. BUSINESS SERVICES	0.03	0.04	0.04	0.04	0.05	0.05	7.25
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.04	0.04	0.04	0.05	0.05	0.05	7.97
TOTAL, ALL INDUSTRIES	0.72	0.80	0.87	0.96	1.04	1.09	8.58
TOTAL EMPLOYMENT							
8. CRUDE PETROLEUM & N. GAS	7.48	7.84	8.19	8.39	8.63	9.05	3.89
13. ORDNANCE & ACCESSORIES	0.03	0.03	0.03	0.03	0.03	0.03	2.06
31. PET REFINING & REL. PROD.	0.65	0.66	0.68	0.69	0.71	0.72	2.07
60. AIRCRAFT & PARTS	0.04	0.04	0.04	0.04	0.05	0.05	2.02
73. BUSINESS SERVICES	0.68	0.69	0.71	0.73	0.74	0.75	1.93
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.78	0.81	0.84	0.86	0.88	0.91	3.14
TOTAL, ALL INDUSTRIES	12.69	13.15	13.61	13.94	14.28	14.81	3.14

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
11. ALL OTHER ENGINEERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
8. CRUDE PETROLEUM & N. GAS	0.03	0.03	0.04	0.04	0.04	0.04	2.22
11. NEW CONSTRUCTION	0.08	0.09	0.10	0.11	0.11	0.12	7.43
13. ORDNANCE & ACCESSORIES	6.85	7.78	8.51	9.23	9.77	10.17	8.22
14. FOOD & KINDRED PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	5.08
24. PAPER & ALLIED PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.02	6.76
27. CHEMICALS & PRODUCTS	0.06	0.07	0.07	0.08	0.08	0.09	7.63
28. PLASTICS & SYNTHETIC MATLS.	0.02	0.02	0.03	0.03	0.03	0.03	8.71
31. PET REFINING & REL. PROD.	0.04	0.05	0.05	0.05	0.05	0.05	3.08
32. RUBBER & MISC. PLASTICS PROD.	0.05	0.05	0.06	0.07	0.07	0.08	10.60
35. GLASS & GLASS PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	9.44
36. STONE & CLAY PRODUCTS	0.02	0.03	0.03	0.03	0.03	0.03	7.80
37. PRIMARY FERROUS METALS	0.11	0.12	0.13	0.14	0.14	0.15	6.98
38. NONFERROUS METALS	0.08	0.09	0.10	0.11	0.12	0.13	9.37
40. FAB. STRUCTURAL METAL PRODUCTS	0.11	0.12	0.13	0.14	0.14	0.15	7.53
41. SCREW MACHINE PROD.&STAMPINGS	0.04	0.05	0.05	0.06	0.06	0.06	7.70
42. OTHER FAB. METAL PRODUCTS	0.03	0.04	0.04	0.04	0.05	0.05	10.09
43. ENGINES & TURBINES	0.09	0.10	0.10	0.11	0.11	0.12	6.32
45. CONSTR. & MINING MACHINERY	0.02	0.02	0.02	0.02	0.02	0.03	7.25
46. MATERIALS HANDLING MACH. & EQ.	0.03	0.04	0.04	0.04	0.05	0.05	9.12
47. METALWORKING MACH. & EQ.	0.06	0.07	0.08	0.08	0.09	0.09	9.36
49. GENERAL INDUSTRY MACHINERY	0.08	0.09	0.10	0.10	0.11	0.11	5.85
50. MISC. NONELECTRICAL MACH.	0.02	0.03	0.03	0.03	0.03	0.03	7.54
51. OFFICE,COMPUTING & ACCT. MACH.	0.24	0.27	0.29	0.31	0.33	0.34	7.32
52. SERVICE INDUSTRY MACHINES	0.02	0.02	0.03	0.03	0.03	0.04	13.36
53. ELECTRICAL MACHINERY	0.07	0.09	0.09	0.10	0.11	0.12	8.98
55. ELECTRIC LIGHTING & WIRING EQ.	0.04	0.05	0.05	0.06	0.06	0.06	8.26
56. RADIO,TV, & COMMUNICATION EQ.	5.19	5.93	6.48	7.00	7.33	7.46	7.53
57. ELECTRONIC COMPONENTS & ACCESS.	0.58	0.69	0.77	0.87	0.94	0.99	11.37
58. MISC. ELECTRICAL MACH. & EQ.	0.05	0.05	0.06	0.06	0.07	0.07	9.57
59. MOTOR VEHICLES & EQUIPMENT	0.19	0.23	0.26	0.31	0.37	0.43	17.14
60. AIRCRAFT & PARTS	8.13	9.15	10.03	11.01	11.72	11.97	8.03
61. OTHER TRANSPORTATION EQ.	0.63	0.67	0.69	0.70	0.72	0.74	3.11
62. INSTRUMENTS & SUPPLIES	0.60	0.68	0.74	0.81	0.86	0.88	7.97
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.09	0.09	0.10	0.11	0.12	0.13	8.66
65. TRANSPORTATION & WAREHOUSING	0.03	0.03	0.03	0.03	0.04	0.04	3.78
66. COMMUNICATION EXC. RADIO & TV	0.15	0.16	0.17	0.18	0.19	0.20	4.94
68. UTILITIES	0.07	0.08	0.08	0.09	0.09	0.09	5.92

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
11. ALL OTHER ENGINEERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
69. WHOLESALE & RETAIL TRADE	0.08	0.09	0.10	0.11	0.12	0.13	9.54
73. BUSINESS SERVICES	0.26	0.28	0.31	0.34	0.36	0.37	7.81
77. MISC. SERVICES	0.09	0.09	0.10	0.10	0.11	0.11	3.91
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	2.17	2.26	2.36	2.47	2.52	2.54	3.15
82. GOVERNMENT INDUSTRY	11.57	11.34	11.57	11.89	12.10	12.18	1.04
TOTAL, ALL INDUSTRIES	38.18	41.25	44.12	47.22	49.43	50.59	5.79
TOTAL EMPLOYMENT							
8. CRUDE PETROLEUM & N. GAS	0.45	0.44	0.43	0.41	0.40	0.40	-2.47
11. NEW CONSTRUCTION	2.19	2.21	2.23	2.27	2.30	2.31	1.08
13. ORDNANCE & ACCESSORIES	11.34	11.64	11.88	12.20	12.41	12.58	2.10
14. FOOD & KINDRED PRODUCTS	0.88	0.89	0.90	0.89	0.88	0.88	-0.04
24. PAPER & ALLIED PRODUCTS	0.58	0.60	0.61	0.61	0.61	0.61	0.92
27. CHEMICALS & PRODUCTS	1.25	1.28	1.30	1.31	1.32	1.32	1.11
28. PLASTICS & SYNTHETIC MATLS.	0.89	0.93	0.96	0.99	1.00	1.00	2.32
31. PET REFINING & REL. PROD.	0.82	0.80	0.79	0.78	0.77	0.75	-1.75
32. RUBBER & MISC. PLASTICS PROD.	1.70	1.76	1.84	1.90	1.96	1.98	3.15
35. GLASS & GLASS PRODUCTS	0.32	0.33	0.33	0.34	0.34	0.33	0.73
36. STONE & CLAY PRODUCTS	0.72	0.73	0.74	0.75	0.75	0.74	0.60
37. PRIMARY FERROUS METALS	1.48	1.52	1.55	1.56	1.55	1.53	0.66
38. NONFERROUS METALS	0.97	1.01	1.05	1.08	1.10	1.12	2.78
40. FAB. STRUCTURAL METAL PRODUCTS	2.36	2.36	2.42	2.49	2.55	2.58	1.80
41. SCREW MACHINE PROD.&STAMPINGS	0.71	0.74	0.77	0.78	0.78	0.79	2.17
42. OTHER FAB. METAL PRODUCTS	0.68	0.70	0.74	0.76	0.78	0.80	3.37
43. ENGINES & TURBINES	1.03	1.05	1.08	1.07	1.07	1.06	0.46
45. CONSTR. & MINING MACHINERY	1.53	1.62	1.71	1.77	1.81	1.83	3.64
46. MATERIALS HANDLING MACH. & EQ.	0.55	0.57	0.60	0.62	0.64	0.65	3.62
47. METALWORKING MACH. & EQ.	1.16	1.21	1.28	1.33	1.37	1.39	3.76
49. GENERAL INDUSTRY MACHINERY	1.88	1.90	1.96	1.98	1.98	1.98	1.04
50. MISC. NONELECTRICAL MACH.	0.21	0.22	0.22	0.23	0.23	0.23	2.23
51. OFFICE,COMPUTING & ACCT. MACH.	6.26	6.51	6.79	6.91	7.01	7.17	2.72
52. SERVICE INDUSTRY MACHINES	1.16	1.20	1.26	1.28	1.28	1.28	2.10
53. ELECTRICAL MACHINERY	1.51	1.53	1.60	1.63	1.65	1.66	1.94
55. ELECTRIC LIGHTING & WIRING EQ.	0.90	0.91	0.94	0.96	0.97	0.98	1.71
56. RADIO,TV, & COMMUNICATION EQ.	12.28	12.50	12.82	12.97	13.02	13.17	1.42
57. ELECTRONIC COMPONENTS & ACCESS.	2.64	2.75	2.89	3.00	3.09	3.15	3.65
58. MISC. ELECTRICAL MACH. & EQ.	1.71	1.77	1.84	1.86	1.89	1.90	2.12
59. MOTOR VEHICLES & EQUIPMENT	10.02	10.47	10.83	11.00	11.12	11.19	2.23

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
11. ALL OTHER ENGINEERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
60. AIRCRAFT & PARTS	16.29	16.86	17.23	17.68	17.63	17.52	1.47
61. OTHER TRANSPORTATION EQ.	2.19	2.25	2.32	2.37	2.37	2.38	1.70
62. INSTRUMENTS & SUPPLIES	5.18	5.26	5.45	5.65	5.79	5.87	2.52
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	1.96	1.99	2.08	2.17	2.25	2.31	3.29
65. TRANSPORTATION & WAREHOUSING	0.71	0.72	0.73	0.75	0.75	0.74	0.88
66. COMMUNICATION EXC. RADIO & TV	6.24	6.27	6.41	6.46	6.60	6.64	1.24
68. UTILITIES	3.21	3.21	3.21	3.20	3.21	3.20	-0.02
69. WHOLESALE & RETAIL TRADE	13.11	13.52	13.93	14.28	14.55	14.83	2.50
73. BUSINESS SERVICES	5.26	5.38	5.52	5.69	5.83	5.93	2.46
77. MISC. SERVICES	14.04	14.21	14.41	14.72	15.07	15.48	1.96
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	10.18	10.37	10.61	10.83	10.98	11.11	1.76
82. GOVERNMENT INDUSTRY	43.85	43.80	44.26	45.10	45.92	46.60	1.22
TOTAL, ALL INDUSTRIES	199.58	203.28	207.99	212.31	215.31	217.82	1.76

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
12. SCIENTISTS NEC
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
2. OTHER AGRICULTURAL PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	2.76
4. AGR.,FORESTRY,&FISHERY SERV.	0.02	0.02	0.02	0.03	0.03	0.03	6.86
5. IRON ORE MINING	0.01	0.01	0.02	0.02	0.02	0.02	8.30
6. NONFERROUS METAL MINING	0.11	0.13	0.15	0.16	0.18	0.19	10.37
7. COAL MINING	0.01	0.02	0.02	0.02	0.02	0.02	9.22
8. CRUDE PETROLEUM & N. GAS	0.72	0.80	0.85	0.93	1.01	1.05	7.72
9. STONE&CLAY MINING & QUARRYING	0.01	0.01	0.01	0.02	0.02	0.02	10.17
11. NEW CONSTRUCTION	0.01	0.01	0.01	0.01	0.01	0.01	8.35
13. ORDNANCE & ACCESSORIES	0.70	0.78	0.84	0.90	0.94	0.97	6.91
14. FOOD & KINDRED PRODUCTS	0.04	0.04	0.04	0.04	0.05	0.05	5.64
16. FABRIC,YARN & THREAD MILLS	0.01	0.01	0.01	0.01	0.01	0.01	5.44
17. MISC. TEXTILE GOODS	0.01	0.01	0.01	0.01	0.01	0.01	7.08
20. LUMBER & WOOD PRODUCTS	0.01	0.02	0.02	0.02	0.02	0.02	8.09
24. PAPER & ALLIED PRODUCTS	0.03	0.03	0.04	0.04	0.04	0.04	7.26
26. PRINTING & PUBLISHING	0.01	0.01	0.01	0.02	0.02	0.02	5.91
27. CHEMICALS & PRODUCTS	0.81	0.91	0.98	1.07	1.16	1.23	8.50
28. PLASTICS & SYNTHETIC MATLS.	0.09	0.10	0.11	0.13	0.14	0.15	10.49
29. DRUGS,CLEANING & TOILET PREP.	0.08	0.08	0.09	0.09	0.10	0.10	5.23
30. PAINTS & ALLIED PRODUCTS	0.14	0.16	0.18	0.20	0.22	0.23	10.21
31. PET REFINING & REL. PROD.	0.20	0.21	0.23	0.24	0.26	0.27	6.03
32. RUBBER & MISC. PLASTICS PROD.	0.05	0.05	0.06	0.07	0.07	0.08	10.17
35. GLASS & GLASS PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	9.62
36. STONE & CLAY PRODUCTS	0.03	0.04	0.04	0.05	0.05	0.05	7.59
37. PRIMARY FERROUS METALS	0.07	0.07	0.08	0.09	0.09	0.10	8.65
38. NONFERROUS METALS	0.09	0.10	0.11	0.12	0.13	0.13	9.16
40. FAB. STRUCTURAL METAL PRODUCTS	0.03	0.03	0.03	0.03	0.04	0.04	7.58
41. SCREW MACHINE PROD.&STAMPINGS	0.01	0.01	0.01	0.01	0.01	0.01	7.61
42. OTHER FAB. METAL PRODUCTS	0.02	0.02	0.02	0.02	0.03	0.03	8.74
43. ENGINES & TURBINES	0.04	0.04	0.05	0.05	0.05	0.06	7.71
49. GENERAL INDUSTRY MACHINERY	0.01	0.01	0.01	0.01	0.01	0.01	7.63
51. OFFICE,COMPUTING & ACCT. MACH.	0.01	0.01	0.01	0.02	0.02	0.02	7.25
53. ELECTRICAL MACHINERY	0.01	0.01	0.01	0.01	0.01	0.01	9.12
55. ELECTRIC LIGHTING & WIRING EQ.	0.01	0.01	0.01	0.01	0.01	0.01	8.21
56. RADIO,TV, & COMMUNICATION EQ.	1.20	1.38	1.52	1.66	1.75	1.79	8.47
57. ELECTRONIC COMPONENTS & ACCESS.	0.12	0.14	0.16	0.18	0.19	0.20	11.38
58. MISC. ELECTRICAL MACH. & EQ.	0.01	0.01	0.01	0.01	0.01	0.01	9.51
59. MOTOR VEHICLES & EQUIPMENT	0.04	0.05	0.06	0.07	0.08	0.09	17.14

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
12. SCIENTISTS NEC
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
60. AIRCRAFT & PARTS	1.55	1.76	1.95	2.16	2.32	2.40	9.16
61. OTHER TRANSPORTATION EQ.	0.05	0.06	0.06	0.06	0.06	0.06	3.04
62. INSTRUMENTS & SUPPLIES	0.23	0.26	0.28	0.31	0.33	0.34	8.37
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.06	0.06	0.07	0.08	0.08	0.09	8.58
65. TRANSPORTATION & WAREHOUSING	0.03	0.03	0.03	0.04	0.04	0.04	4.32
66. COMMUNICATION EXC. RADIO & TV	0.02	0.02	0.02	0.02	0.02	0.02	5.78
68. UTILITIES	0.03	0.03	0.04	0.04	0.04	0.04	6.01
69. WHOLESALE & RETAIL TRADE	0.03	0.03	0.04	0.04	0.04	0.04	8.65
70. FINANCE & INSURANCE	0.09	0.10	0.11	0.13	0.14	0.15	10.90
73. BUSINESS SERVICES	0.88	0.99	1.08	1.19	1.27	1.31	8.35
77. MISC. SERVICES	0.39	0.40	0.42	0.45	0.47	0.48	4.09
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	1.89	1.90	1.97	2.05	2.10	2.13	2.36
82. GOVERNMENT INDUSTRY	18.64	18.29	18.65	19.18	19.51	19.66	1.07
TOTAL, ALL INDUSTRIES	28.70	29.35	30.61	32.15	33.29	33.91	3.40
TOTAL EMPLOYMENT							
2. OTHER AGRICULTURAL PRODUCTS	4.38	4.39	4.42	4.40	4.39	4.38	0.02
4. AGR.,FORESTRY,&FISHERY SERV.	1.13	1.17	1.18	1.20	1.22	1.24	1.77
5. IRON ORE MINING	0.24	0.26	0.28	0.28	0.28	0.27	2.11
6. NONFERROUS METAL MINING	1.97	2.07	2.14	2.18	2.15	2.16	1.84
7. COAL MINING	0.51	0.54	0.56	0.57	0.59	0.61	3.51
8. CRUDE PETROLEUM & N. GAS	9.79	10.13	10.46	10.61	10.80	11.22	2.78
9. STONE&CLAY MINING & QUARRYING	0.36	0.36	0.38	0.39	0.40	0.41	2.75
11. NEW CONSTRUCTION	0.26	0.26	0.27	0.28	0.28	0.29	1.94
13. ORDNANCE & ACCESSORIES	1.15	1.17	1.18	1.19	1.20	1.20	0.86
14. FOOD & KINDRED PRODUCTS	5.46	5.57	5.63	5.64	5.62	5.60	0.49
16. FABRIC,YARN & THREAD MILLS	0.45	0.46	0.48	0.49	0.49	0.50	2.04
17. MISC. TEXTILE GOODS	0.39	0.40	0.42	0.43	0.44	0.44	2.68
20. LUMBER & WOOD PRODUCTS	0.69	0.74	0.76	0.78	0.78	0.77	2.33
24. PAPER & ALLIED PRODUCTS	1.61	1.67	1.70	1.71	1.72	1.73	1.39
26. PRINTING & PUBLISHING	0.77	0.77	0.78	0.78	0.78	0.79	0.30
27. CHEMICALS & PRODUCTS	16.93	17.40	17.82	18.14	18.39	18.62	1.93
28. PLASTICS & SYNTHETIC MATLS.	3.71	3.92	4.13	4.30	4.43	4.52	3.99
29. DRUGS,CLEANING & TOILET PREP.	21.81	22.20	22.78	23.30	23.54	23.83	1.79
30. PAINTS & ALLIED PRODUCTS	2.71	2.89	3.05	3.22	3.34	3.44	4.89
31. PET REFINING & REL. PROD.	3.73	3.75	3.80	3.86	3.90	3.93	1.06
32. RUBBER & MISC. PLASTICS PROD.	1.77	1.82	1.90	1.96	2.01	2.02	2.75
35. GLASS & GLASS PRODUCTS	0.41	0.42	0.43	0.43	0.43	0.43	0.89

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
12. SCIENTISTS NEC
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
36. STONE & CLAY PRODUCTS	1.08	1.10	1.11	1.13	1.12	1.10	0.40
37. PRIMARY FERROUS METALS	0.91	0.95	0.99	1.01	1.02	1.02	2.23
38. NONFERROUS METALS	1.03	1.06	1.11	1.14	1.15	1.17	2.58
40. FAB. STRUCTURAL METAL PRODUCTS	0.57	0.58	0.59	0.61	0.62	0.63	1.85
41. SCREW MACHINE PROD.&STAMPINGS	0.15	0.15	0.16	0.16	0.16	0.16	2.08
42. OTHER FAB. METAL PRODUCTS	0.38	0.39	0.41	0.41	0.42	0.43	2.10
43. ENGINES & TURBINES	0.48	0.49	0.51	0.51	0.52	0.52	1.77
49. GENERAL INDUSTRY MACHINERY	0.14	0.15	0.15	0.16	0.16	0.16	2.73
51. OFFICE,COMPUTING & ACCT. MACH.	0.31	0.32	0.34	0.34	0.35	0.36	2.66
53. ELECTRICAL MACHINERY	0.17	0.18	0.18	[illegible]	0.19	0.19	2.07
55. ELECTRIC LIGHTING & WIRING EQ.	0.17	0.17	0.17	0.18	0.18	0.18	1.67
56. RADIO,TV, & COMMUNICATION EQ.	2.83	2.91	3.01	3.07	3.11	3.17	2.30
57. ELECTRONIC COMPONENTS & ACCESS.	0.54	0.57	0.59	0.62	0.64	0.65	3.66
58. MISC. ELECTRICAL MACH. & EQ.	0.32	0.33	0.35	0.35	0.35	0.36	2.07
59. MOTOR VEHICLES & EQUIPMENT	2.13	2.22	2.30	2.34	2.36	2.38	2.23
60. AIRCRAFT & PARTS	3.10	3.24	3.35	3.47	3.49	3.51	2.53
61. OTHER TRANSPORTATION EQ.	0.18	0.19	0.19	0.20	0.20	0.20	1.63
62. INSTRUMENTS & SUPPLIES	1.96	2.00	2.08	2.16	2.22	2.26	2.90
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	1.34	1.36	1.42	1.49	1.54	1.58	3.22
65. TRANSPORTATION & WAREHOUSING	0.74	0.76	0.77	0.79	0.79	0.79	1.40
66. COMMUNICATION EXC. RADIO & TV	0.61	0.62	0.64	0.65	0.67	0.68	2.06
68. UTILITIES	1.41	1.42	1.42	1.42	1.42	1.42	0.06
69. WHOLESALE & RETAIL TRADE	4.80	4.91	5.01	5.10	5.15	5.21	1.67
70. FINANCE & INSURANCE	10.30	10.64	11.02	11.46	11.92	12.37	3.72
73. BUSINESS SERVICES	18.14	18.66	19.25	19.95	20.54	21.00	2.97
77. MISC. SERVICES	60.86	61.69	62.68	64.12	65.79	67.65	2.14
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	15.03	15.25	15.55	15.90	16.21	16.50	1.88
82. GOVERNMENT INDUSTRY	124.93	124.95	126.45	129.02	131.57	133.68	1.36
TOTAL, ALL INDUSTRIES	338.32	343.14	349.91	357.73	364.73	371.39	1.88

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
13. CHEMISTS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
6. NONFERROUS METAL MINING	0.02	0.02	0.03	0.03	0.03	0.03	11.57
7. COAL MINING	0.01	0.01	C.01	0.01	0.01	0.01	9.17
8. CRUDE PETROLEUM & N. GAS	0.03	0.03	0.03	0.03	0.04	0.04	4.65
13. ORDNANCE & ACCESSORIES	0.33	0.37	0.40	0.43	0.44	0.46	6.66
14. FOOD & KINDRED PRODUCTS	0.03	0.03	0.04	0.04	0.04	0.04	5.69
16. FABRIC,YARN & THREAD MILLS	0.01	0.01	0.01	0.01	0.01	0.01	5.55
24. PAPER & ALLIED PRODUCTS	0.03	0.03	0.03	0.03	0.04	0.04	7.42
27. CHEMICALS & PRODUCTS	0.69	0.77	0.83	0.91	0.99	1.04	8.67
28. PLASTICS & SYNTHETIC MATLS.	0.08	0.09	0.10	0.11	0.12	0.13	10.77
29. DRUGS,CLEANING & TOILET PREP.	0.04	0.04	0.04	0.05	0.05	0.05	6.10
30. PAINTS & ALLIED PRODUCTS	0.14	0.16	0.18	0.20	0.22	0.23	10.24
31. PET REFINING & REL. PROD.	0.14	0.15	0.16	0.18	0.19	0.20	6.34
32. RUBBER & MISC. PLASTICS PROD.	0.04	0.05	0.05	0.06	0.07	0.07	10.19
36. STONE & CLAY PRODUCTS	0.03	0.04	0.04	0.04	0.04	0.05	7.70
37. PRIMARY FERROUS METALS	0.06	0.07	0.07	0.08	0.09	0.09	8.75
38. NONFERROUS METALS	0.08	0.09	0.10	0.11	0.12	0.12	9.06
40. FAB. STRUCTURAL METAL PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	7.98
42. OTHER FAB. METAL PRODUCTS	0.02	0.02	0.02	0.02	0.02	0.03	8.67
43. ENGINES & TURBINES	0.02	0.02	0.02	0.02	0.02	0.02	7.74
51. OFFICE,COMPUTING & ACCT. MACH.	0.01	0.01	0.01	0.01	0.01	0.01	7.27
56. RADIO,TV, & COMMUNICATION EQ.	0.07	0.08	0.09	0.09	0.10	0.10	8.26
57. ELECTRONIC COMPONENTS & ACCESS.	0.06	0.07	0.08	0.09	0.10	0.11	11.37
60. AIRCRAFT & PARTS	0.25	0.29	0.31	0.35	0.37	0.38	8.58
61. OTHER TRANSPORTATION EQ.	0.02	0.02	0.02	0.02	0.02	0.02	3.42
62. INSTRUMENTS & SUPPLIES	0.09	0.10	0.11	0.12	0.13	0.14	8.28
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.04	0.05	0.05	0.06	0.06	0.06	8.59
68. UTILITIES	0.01	0.01	0.01	0.02	0.02	0.02	6.15
69. WHOLESALE & RETAIL TRADE	0.01	0.01	0.01	0.01	0.01	0.01	8.43
73. BUSINESS SERVICES	0.29	0.32	0.35	0.39	0.42	0.43	8.47
77. MISC. SERVICES	0.07	0.08	0.08	0.08	0.09	0.09	3.44
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.11	0.11	0.12	0.13	0.13	0.13	4.02
82. GOVERNMENT INDUSTRY	1.83	1.81	1.86	1.93	1.98	2.01	1.81
TOTAL, ALL INDUSTRIES	4.73	5.03	5.36	5.75	6.07	6.27	5.82
TOTAL EMPLOYMENT							
6. NONFERROUS METAL MINING	0.33	0.35	0.37	0.38	0.38	0.39	2.95

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
13. CHEMISTS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
7. COAL MINING	0.23	0.24	0.25	0.26	0.27	0.27	3.47
8. CRUDE PETROLEUM & N. GAS	0.39	0.39	0.39	0.39	0.38	0.39	-0.15
13. ORDNANCE & ACCESSORIES	0.55	0.55	0.56	0.56	0.56	0.56	0.63
14. FOOD & KINDRED PRODUCTS	4.67	4.76	4.81	4.82	4.80	4.79	0.54
16. FABRIC, YARN & THREAD MILLS	0.41	0.43	0.44	0.45	0.46	0.46	2.14
24. PAPER & ALLIED PRODUCTS	1.38	1.43	1.45	1.47	1.48	1.49	1.55
27. CHEMICALS & PRODUCTS	14.31	14.73	15.11	15.41	15.64	15.86	2.09
28. PLASTICS & SYNTHETIC MATLS.	3.20	3.38	3.57	3.73	3.85	3.94	4.25
29. DRUGS, CLEANING & TOILET PREP.	10.83	11.12	11.51	11.87	12.09	12.33	2.64
30. PAINTS & ALLIED PRODUCTS	2.68	2.86	3.02	3.18	3.30	3.40	4.91
31. PET REFINING & REL. PROD.	2.68	2.71	2.75	2.80	2.84	2.87	1.35
32. RUBBER & MISC. PLASTICS PROD.	1.60	1.65	1.72	1.77	1.81	1.83	2.77
36. STONE & CLAY PRODUCTS	0.97	0.98	0.99	1.01	1.01	0.99	0.51
37. PRIMARY FERROUS METALS	0.83	0.86	0.89	0.91	0.92	0.93	2.32
38. NONFERROUS METALS	0.93	0.96	1.00	1.03	1.04	1.05	2.48
40. FAB. STRUCTURAL METAL PRODUCTS	0.21	0.21	0.22	0.23	0.23	0.23	2.23
42. OTHER FAB. METAL PRODUCTS	0.36	0.37	0.38	0.39	0.40	0.40	2.04
43. ENGINES & TURBINES	0.20	0.21	0.21	0.21	0.22	0.22	1.80
51. OFFICE, COMPUTING & ACCT. MACH.	0.15	0.15	0.16	0.16	0.16	0.17	2.67
56. RADIO, TV, & COMMUNICATION EQ.	0.16	0.16	0.17	0.17	0.17	0.18	2.10
57. ELECTRONIC COMPONENTS & ACCESS.	0.29	0.30	0.31	0.33	0.33	0.34	3.65
60. AIRCRAFT & PARTS	0.51	0.53	0.54	0.56	0.56	0.56	1.98
61. OTHER TRANSPORTATION EQ.	0.07	0.07	0.07	0.07	0.07	0.07	2.01
62. INSTRUMENTS & SUPPLIES	0.79	0.81	0.84	0.87	0.90	0.91	2.82
63. OPTICAL, OPHTHALMIC & PHOTO EQ.	0.97	0.99	1.03	1.08	1.11	1.14	3.23
68. UTILITIES	0.58	0.58	0.58	0.58	0.58	0.58	0.19
69. WHOLESALE & RETAIL TRADE	0.93	0.95	0.97	0.98	0.99	1.00	1.46
73. BUSINESS SERVICES	5.91	6.09	6.29	6.53	6.73	6.89	3.09
77. MISC. SERVICES	11.60	11.68	11.79	11.99	12.23	12.50	1.50
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	1.42	1.46	1.49	1.53	1.56	1.58	2.12
82. GOVERNMENT INDUSTRY	17.75	17.83	18.11	18.53	18.95	19.35	1.74
TOTAL, ALL INDUSTRIES	91.88	93.89	96.24	98.56	100.38	102.03	2.12

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
14. PHYSICISTS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	0.15	0.17	0.18	0.19	0.20	0.21	6.56
27. CHEMICALS & PRODUCTS	0.02	0.02	0.02	0.02	0.03	0.03	7.91
40. FAB. STRUCTURAL METAL PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	6.98
43. ENGINES & TURBINES	0.01	0.01	0.01	0.02	0.02	0.02	7.71
56. RADIO,TV, & COMMUNICATION EQ.	0.30	0.34	0.38	0.42	0.44	0.46	9.04
57. ELECTRONIC COMPONENTS & ACCESS.	0.03	0.04	0.04	0.05	0.05	0.05	11.38
60. AIRCRAFT & PARTS	0.21	0.24	0.28	0.32	0.35	0.38	12.55
61. OTHER TRANSPORTATION EQ.	0.01	0.01	0.01	0.01	0.01	0.01	3.28
62. INSTRUMENTS & SUPPLIES	0.03	0.03	0.04	0.04	0.04	0.05	7.76
73. BUSINESS SERVICES	0.16	0.18	0.20	0.22	0.23	0.24	8.01
77. MISC. SERVICES	0.03	0.03	0.03	0.04	0.04	0.04	2.96
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.18	0.18	0.18	0.19	0.19	0.19	1.97
82. GOVERNMENT INDUSTRY	3.18	3.11	3.17	3.25	3.30	3.32	0.90
TOTAL, ALL INDUSTRIES	4.34	4.41	4.59	4.81	4.96	5.04	3.02
TOTAL EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	0.25	0.25	0.25	0.26	0.26	0.26	0.53
27. CHEMICALS & PRODUCTS	0.38	0.39	0.40	0.40	0.41	0.41	1.37
40. FAB. STRUCTURAL METAL PRODUCTS	0.16	0.16	0.17	0.17	0.17	0.18	1.28
43. ENGINES & TURBINES	0.14	0.14	0.15	0.15	0.15	0.15	1.77
56. RADIO,TV, & COMMUNICATION EQ.	0.70	0.72	0.75	0.77	0.79	0.81	2.84
57. ELECTRONIC COMPONENTS & ACCESS.	0.14	0.15	0.15	0.16	0.16	0.17	3.66
60. AIRCRAFT & PARTS	0.42	0.45	0.48	0.51	0.53	0.55	5.72
61. OTHER TRANSPORTATION EQ.	0.02	0.02	0.02	0.02	0.02	0.02	1.87
62. INSTRUMENTS & SUPPLIES	0.27	0.27	0.28	0.29	0.30	0.30	2.32
73. BUSINESS SERVICES	3.36	3.45	3.54	3.66	3.76	3.83	2.65
77. MISC. SERVICES	5.12	5.13	5.15	5.21	5.29	5.38	1.02
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.73	0.73	0.74	0.76	0.77	0.78	1.49
82. GOVERNMENT INDUSTRY	9.52	9.49	9.57	9.72	9.88	10.01	1.00
TOTAL, ALL INDUSTRIES	22.17	22.34	22.66	23.11	23.52	23.88	1.49

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
15. BIOLOGICAL&MEDICAL SCIENTISTS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
11. NEW CONSTRUCTION	0.01	0.01	0.01	0.01	0.01	0.01	8.31
13. ORDNANCE & ACCESSORIES	0.05	0.06	0.07	0.07	0.08	0.08	7.71
27. CHEMICALS & PRODUCTS	0.04	0.04	0.05	0.05	0.05	0.06	7.55
29. DRUGS,CLEANING & TOILET PREP.	0.02	0.03	0.03	0.03	0.03	0.03	4.34
60. AIRCRAFT & PARTS	0.02	0.02	0.03	0.03	0.03	0.03	8.60
62. INSTRUMENTS & SUPPLIES	0.04	0.05	0.06	0.06	0.07	0.07	9.06
69. WHOLESALE & RETAIL TRADE	0.01	0.01	0.01	0.01	0.01	0.01	8.40
73. BUSINESS SERVICES	0.08	0.09	0.10	0.11	0.11	0.11	6.64
77. MISC. SERVICES	0.14	0.14	0.15	0.16	0.17	0.17	4.38
82. GOVERNMENT INDUSTRY	0.88	0.86	0.88	0.90	0.92	0.93	1.05
TOTAL, ALL INDUSTRIES	1.37	1.39	1.44	1.51	1.56	1.59	2.99
TOTAL EMPLOYMENT							
11. NEW CONSTRUCTION	0.19	0.20	0.20	0.21	0.21	0.21	1.91
13. ORDNANCE & ACCESSORIES	0.09	0.09	0.09	0.10	0.10	0.10	1.61
27. CHEMICALS & PRODUCTS	0.83	0.84	0.86	0.86	0.87	0.87	1.04
29. DRUGS,CLEANING & TOILET PREP.	6.98	7.04	7.16	7.26	7.28	7.31	0.93
60. AIRCRAFT & PARTS	0.04	0.04	0.04	0.05	0.05	0.05	2.01
62. INSTRUMENTS & SUPPLIES	0.39	0.40	0.42	0.43	0.45	0.46	3.55
69. WHOLESALE & RETAIL TRADE	1.08	1.11	1.13	1.14	1.15	1.16	1.44
73. BUSINESS SERVICES	1.72	1.74	1.76	1.80	1.82	1.84	1.34
77. MISC. SERVICES	21.69	22.04	22.46	23.04	23.70	24.44	2.42
82. GOVERNMENT INDUSTRY	21.81	21.71	21.86	22.17	22.48	22.77	0.87
TOTAL, ALL INDUSTRIES	56.65	57.06	57.86	58.96	60.03	61.15	1.54

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
16. LIFE&PHYSICAL SCINTISTS NEC
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
4. AGR.,FORESTRY,&FISHERY SERV.	0.02	0.02	0.02	0.02	0.02	0.02	6.86
5. IRON ORE MINING	0.01	0.01	0.01	0.01	0.01	0.01	8.56
6. NONFERROUS METAL MINING	0.09	0.11	0.12	0.13	0.14	0.15	10.09
7. COAL MINING	0.01	0.01	0.01	0.01	0.01	0.01	9.27
8. CRUDE PETROLEUM & N. GAS	0.66	0.73	0.78	0.85	0.93	0.97	7.99
9. STONE&CLAY MINING & QUARRYING	0.01	0.01	0.01	0.01	0.01	0.01	10.13
13. ORDNANCE & ACCESSORIES	0.07	0.08	0.08	0.09	0.09	0.10	7.16
20. LUMBER & WOOD PRODUCTS	0.01	0.01	0.02	0.02	0.02	0.02	7.94
27. CHEMICALS & PRODUCTS	0.04	0.05	0.05	0.05	0.06	0.06	7.52
29. DRUGS,CLEANING & TOILET PREP.	0.01	0.01	0.01	0.01	0.01	0.02	4.33
31. PET REFINING & REL. PROD.	0.03	0.03	0.03	0.03	0.03	0.03	5.23
43. ENGINES & TURBINES	0.01	0.01	0.01	0.01	0.01	0.01	7.69
56. RADIO,TV, & COMMUNICATION EQ.	0.19	0.22	0.24	0.26	0.27	0.28	8.23
60. AIRCRAFT & PARTS	0.16	0.19	0.20	0.22	0.24	0.25	8.59
61. OTHER TRANSPORTATION EQ.	0.01	0.01	0.01	0.01	0.01	0.01	2.59
62. INSTRUMENTS & SUPPLIES	0.03	0.03	0.03	0.03	0.04	0.04	8.32
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.01	0.01	0.01	0.01	0.01	0.01	8.52
65. TRANSPORTATION & WAREHOUSING	0.01	0.01	0.02	0.02	0.02	0.02	4.68
68. UTILITIES	0.01	0.01	0.01	0.01	0.01	0.01	5.67
69. WHOLESALE & RETAIL TRADE	0.01	0.01	0.01	0.02	0.02	0.02	8.85
70. FINANCE & INSURANCE	0.01	0.01	0.01	0.01	0.01	0.01	10.01
73. BUSINESS SERVICES	0.15	0.17	0.19	0.21	0.23	0.24	9.40
77. MISC. SERVICES	0.08	0.09	0.09	0.09	0.10	0.10	4.03
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	1.79	1.79	1.84	1.91	1.96	1.99	2.04
82. GOVERNMENT INDUSTRY	6.84	6.71	6.85	7.04	7.16	7.22	1.08
TOTAL, ALL INDUSTRIES	10.33	10.39	10.74	11.19	11.53	11.70	2.52
TOTAL EMPLOYMENT							
4. AGR.,FORESTRY,&FISHERY SERV.	0.90	0.92	0.93	0.95	0.96	0.98	1.77
5. IRON ORE MINING	0.15	0.17	0.18	0.18	0.18	0.17	2.36
6. NONFERROUS METAL MINING	1.62	1.69	1.74	1.77	1.75	1.75	1.58
7. COAL MINING	0.21	0.22	0.23	0.23	0.24	0.25	3.57
8. CRUDE PETROLEUM & N. GAS	8.93	9.27	9.60	9.76	9.96	10.37	3.03
9. STONE&CLAY MINING & QUARRYING	0.22	0.22	0.23	0.24	0.24	0.25	2.71
13. ORDNANCE & ACCESSORIES	0.11	0.11	0.11	0.12	0.12	0.12	1.10
20. LUMBER & WOOD PRODUCTS	0.65	0.69	0.71	0.73	0.73	0.72	2.18

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
16. LIFE&PHYSICAL SCINTISTS NEC
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
27. CHEMICALS & PRODUCTS	0.88	0.90	0.91	0.92	0.92	0.93	1.01
29. DRUGS,CLEANING & TOILET PREP.	3.43	3.46	3.52	3.57	3.57	3.59	0.92
31. PET REFINING & REL. PROD.	0.49	0.49	0.49	0.50	0.50	0.50	0.30
43. ENGINES & TURBINES	0.12	0.13	0.13	0.13	0.14	0.14	1.75
56. RADIO,TV, & COMMUNICATION EQ.	0.44	0.45	0.47	0.48	0.48	0.49	2.07
60. AIRCRAFT & PARTS	0.33	0.34	0.35	0.36	0.36	0.36	1.99
61. OTHER TRANSPORTATION EQ.	0.03	0.03	0.03	0.03	0.03	0.03	1.19
62. INSTRUMENTS & SUPPLIES	0.22	0.22	0.23	0.24	0.25	0.25	2.86
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.16	0.16	0.17	0.17	0.18	0.18	3.16
65. TRANSPORTATION & WAREHOUSING	0.33	0.34	0.35	0.36	0.36	0.36	1.75
68. UTILITIES	0.27	0.27	0.27	0.27	0.27	0.27	-0.26
69. WHOLESALE & RETAIL TRADE	1.92	1.96	2.01	2.05	2.07	2.10	1.86
70. FINANCE & INSURANCE	1.03	1.05	1.08	1.12	1.15	1.19	2.88
73. BUSINESS SERVICES	3.18	3.30	3.44	3.60	3.74	3.86	3.97
77. MISC. SERVICES	12.96	13.12	13.33	13.63	13.97	14.36	2.07
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	12.37	12.51	12.74	13.00	13.25	13.49	1.76
82. GOVERNMENT INDUSTRY	51.51	51.59	52.30	53.48	54.65	55.53	1.51
TOTAL, ALL INDUSTRIES	109.10	110.37	112.35	114.70	116.89	119.04	1.76

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE
BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
17. MATHEMATICIANS&STATISTICIANS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
8. CRUDE PETROLEUM & N. GAS	0.03	0.03	0.03	0.03	0.03	0.03	4.83
13. ORDNANCE & ACCESSORIES	0.08	0.09	0.10	0.10	0.11	0.11	7.62
27. CHEMICALS & PRODUCTS	0.03	0.03	0.03	0.03	0.03	0.04	7.16
28. PLASTICS & SYNTHETIC MATLS.	0.01	0.01	0.01	0.01	0.01	0.01	8.68
31. PET REFINING & REL. PROD.	0.03	0.03	0.03	0.03	0.03	0.04	5.21
56. RADIO,TV, & COMMUNICATION EQ.	0.56	0.65	0.71	0.77	0.82	0.84	8.28
57. ELECTRONIC COMPONENTS & ACCESS.	0.02	0.02	0.02	0.03	0.03	0.03	11.37
59. MOTOR VEHICLES & EQUIPMENT	0.03	0.04	0.04	0.05	0.06	0.07	17.15
60. AIRCRAFT & PARTS	0.86	0.97	1.07	1.18	1.26	1.30	8.60
61. OTHER TRANSPORTATION EQ.	0.02	0.02	0.02	0.02	0.02	0.02	2.76
62. INSTRUMENTS & SUPPLIES	0.03	0.04	0.04	0.05	0.05	0.05	8.25
65. TRANSPORTATION & WAREHOUSING	0.01	0.01	0.01	0.02	0.02	0.02	4.08
66. COMMUNICATION EXC. RADIO & TV	0.01	0.01	0.01	0.01	0.01	0.01	5.81
68. UTILITIES	0.01	0.01	0.01	0.01	0.01	0.01	5.95
70. FINANCE & INSURANCE	0.03	0.04	0.04	0.05	0.05	0.05	9.97
73. BUSINESS SERVICES	0.19	0.21	0.23	0.25	0.27	0.28	8.18
77. MISC. SERVICES	0.04	0.04	0.04	0.05	0.05	0.05	4.72
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.05	0.05	0.06	0.06	0.06	0.06	2.41
82. GOVERNMENT INDUSTRY	2.54	2.49	2.53	2.60	2.65	2.66	1.00
TOTAL, ALL INDUSTRIES	4.63	4.84	5.12	5.43	5.65	5.76	4.50
TOTAL EMPLOYMENT							
8. CRUDE PETROLEUM & N. GAS	0.36	0.37	0.37	0.36	0.36	0.36	0.02
13. ORDNANCE & ACCESSORIES	0.13	0.13	0.14	0.14	0.14	0.14	1.53
27. CHEMICALS & PRODUCTS	0.53	0.53	0.54	0.54	0.54	0.54	0.67
28. PLASTICS & SYNTHETIC MATLS.	0.31	0.32	0.33	0.34	0.34	0.34	2.29
31. PET REFINING & REL. PROD.	0.51	0.51	0.51	0.51	0.52	0.52	0.28
56. RADIO,TV, & COMMUNICATION EQ.	1.33	1.36	1.41	1.44	1.45	1.48	2.12
57. ELECTRONIC COMPONENTS & ACCESS.	0.08	0.09	0.09	0.10	0.10	0.10	3.65
59. MOTOR VEHICLES & EQUIPMENT	1.54	1.61	1.67	1.70	1.72	1.72	2.24
60. AIRCRAFT & PARTS	1.72	1.79	1.84	1.89	1.90	1.90	2.00
61. OTHER TRANSPORTATION EQ.	0.07	0.07	0.07	0.07	0.07	0.07	1.36
62. INSTRUMENTS & SUPPLIES	0.29	0.30	0.31	0.32	0.33	0.34	2.79
65. TRANSPORTATION & WAREHOUSING	0.32	0.33	0.33	0.34	0.34	0.34	1.17
66. COMMUNICATION EXC. RADIO & TV	0.44	0.44	0.46	0.47	0.48	0.49	2.09
68. UTILITIES	0.44	0.44	0.44	0.44	0.44	0.44	0.01

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
17. MATHEMATICIANS&STATISTICIANS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
70. FINANCE & INSURANCE	3.97	4.06	4.17	4.30	4.43	4.57	2.85
73. BUSINESS SERVICES	3.87	3.97	4.09	4.23	4.35	4.44	2.81
77. MISC. SERVICES	6.38	6.51	6.66	6.85	7.07	7.31	2.75
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.35	0.35	0.36	0.36	0.37	0.38	1.81
82. GOVERNMENT INDUSTRY	14.55	14.49	14.59	14.81	15.02	15.22	0.90
TOTAL, ALL INDUSTRIES	39.77	40.31	41.07	41.97	42.76	43.50	1.81

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
18. MATHEMATICAL SPECIALISTS NEC
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	0.01	0.02	0.02	0.02	0.02	0.02	8.13
56. RADIO,TV, & COMMUNICATION EQ.	0.08	0.09	0.10	0.11	0.11	0.12	8.31
60. AIRCRAFT & PARTS	0.04	0.05	0.05	0.06	0.06	0.07	8.67
70. FINANCE & INSURANCE	0.05	0.05	0.06	0.07	0.07	0.08	11.75
77. MISC. SERVICES	0.02	0.02	0.02	0.02	0.03	0.03	5.24
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.26	0.25	0.26	0.27	0.27	0.28	1.40
82. GOVERNMENT INDUSTRY	3.38	3.31	3.36	3.45	3.50	3.52	0.85
TOTAL, ALL INDUSTRIES	3.85	3.80	3.89	4.02	4.09	4.13	1.41
TOTAL EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	0.02	0.02	0.02	0.02	0.02	0.02	2.01
56. RADIO,TV, & COMMUNICATION EQ.	0.19	0.19	0.20	0.20	0.20	0.21	2.15
60. AIRCRAFT & PARTS	0.09	0.09	0.09	0.10	0.10	0.10	2.07
70. FINANCE & INSURANCE	5.31	5.53	5.78	6.05	6.34	6.62	4.51
77. MISC. SERVICES	3.12	3.20	3.29	3.40	3.53	3.67	3.27
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	1.06	1.08	1.11	1.14	1.18	1.21	2.75
82. GOVERNMENT INDUSTRY	9.70	9.73	9.87	10.11	10.35	10.51	1.61
TOTAL, ALL INDUSTRIES	20.22	20.60	21.13	21.83	22.53	23.16	2.75

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
19. ENGINEERING&SCIENCE TECHNICIANS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
2. OTHER AGRICULTURAL PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	2.79
4. AGR.,FORESTRY,&FISHERY SERV.	0.04	0.05	0.05	0.05	0.06	0.06	6.86
5. IRON ORE MINING	0.02	0.02	0.02	0.03	0.03	0.03	7.91
6. NONFERROUS METAL MINING	0.09	0.11	0.12	0.13	0.15	0.15	10.46
7. COAL MINING	0.06	0.07	0.08	0.09	0.10	0.11	10.33
8. CRUDE PETROLEUM & N. GAS	0.64	0.69	0.72	0.77	0.82	0.84	5.38
9. STONE&CLAY MINING & QUARRYING	0.02	0.02	0.03	0.03	0.03	0.03	10.09
10. CHEM&FERTILIZER MIN. MINING	0.01	0.01	0.01	0.01	0.01	0.01	7.91
11. NEW CONSTRUCTION	1.37	1.57	1.70	1.90	2.06	2.18	9.74
13. ORDNANCE & ACCESSORIES	7.95	9.09	10.00	10.92	11.62	12.17	8.89
14. FOOD & KINDRED PRODUCTS	0.07	0.07	0.08	0.08	0.09	0.09	6.12
16. FABRIC,YARN & THREAD MILLS	0.03	0.03	0.03	0.04	0.04	0.04	5.77
17. MISC. TEXTILE GOODS	0.02	0.02	0.02	0.02	0.02	0.02	7.13
19. MISC. FABRICATED TEXTILE PROD.	0.01	0.01	0.01	0.01	0.01	0.01	4.67
20. LUMBER & WOOD PRODUCTS	0.09	0.10	0.11	0.12	0.13	0.14	9.66
21. WOOD CONTAINERS	0.01	0.01	0.01	0.01	0.01	0.01	9.92
23. OTHER FURNITURE & FIXTURES	0.03	0.03	0.03	0.03	0.04	0.04	5.48
24. PAPER & ALLIED PRODUCTS	0.06	0.07	0.07	0.08	0.08	0.08	6.48
25. PAPERBOARD CONTAINERS & BOXES	0.01	0.01	0.01	0.01	0.01	0.01	8.73
26. PRINTING & PUBLISHING	0.03	0.03	0.04	0.04	0.04	0.04	6.19
27. CHEMICALS & PRODUCTS	1.00	1.11	1.20	1.31	1.42	1.50	8.37
28. PLASTICS & SYNTHETIC MATLS.	0.18	0.20	0.22	0.24	0.26	0.28	9.54
29. DRUGS,CLEANING & TOILET PREP.	0.05	0.05	0.06	0.06	0.06	0.06	5.17
30. PAINTS & ALLIED PRODUCTS	0.06	0.07	0.08	0.09	0.09	0.10	9.50
31. PET REFINING & REL. PROD.	0.27	0.29	0.31	0.33	0.35	0.37	5.93
32. RUBBER & MISC. PLASTICS PROD.	0.24	0.27	0.30	0.34	0.37	0.40	10.70
35. GLASS & GLASS PRODUCTS	0.03	0.04	0.04	0.05	0.05	0.05	8.89
36. STONE & CLAY PRODUCTS	0.15	0.18	0.19	0.21	0.22	0.23	8.51
37. PRIMARY FERROUS METALS	0.49	0.55	0.59	0.65	0.69	0.73	8.27
38. NONFERROUS METALS	0.44	0.51	0.56	0.63	0.68	0.72	10.26
40. FAB. STRUCTURAL METAL PRODUCTS	0.72	0.83	0.89	0.97	1.04	1.11	8.99
41. SCREW MACHINE PROD.&STAMPINGS	0.14	0.16	0.17	0.18	0.20	0.21	8.36
42. OTHER FAB. METAL PRODUCTS	0.23	0.27	0.30	0.34	0.37	0.40	11.04
43. ENGINES & TURBINES	0.29	0.33	0.37	0.39	0.42	0.44	8.70
44. FARM & GARDEN MACHINERY	0.01	0.01	0.01	0.01	0.01	0.02	9.26
45. CONSTR. & MINING MACHINERY	0.11	0.13	0.14	0.15	0.17	0.17	8.99
46. MATERIALS HANDLING MACH. & EQ.	0.19	0.23	0.25	0.28	0.31	0.33	10.90

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
19. ENGINEERING&SCIENCE TECHNICIANS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
47. METALWORKING MACH. & EQ.	0.47	0.55	0.60	0.67	0.73	0.76	9.93
48. SPECIAL INDUSTRY MACHINERY	0.05	0.06	0.07	0.08	0.09	0.09	12.96
49. GENERAL INDUSTRY MACHINERY	0.45	0.51	0.55	0.59	0.64	0.67	8.32
50. MISC. NONELECTRICAL MACH.	0.26	0.28	0.31	0.35	0.37	0.38	8.16
51. OFFICE,COMPUTING & ACCT. MACH.	1.43	1.68	1.85	2.03	2.14	2.23	9.26
52. SERVICE INDUSTRY MACHINES	0.08	0.09	0.10	0.12	0.14	0.16	14.01
53. ELECTRICAL MACHINERY	0.65	0.75	0.83	0.92	1.00	1.05	10.18
54. HOUSEHOLD APPLIANCES	0.01	0.01	0.01	0.01	0.01	0.01	9.50
55. ELECTRIC LIGHTING & WIRING EQ.	0.16	0.18	0.19	0.21	0.23	0.24	9.04
56. RADIO,TV, & COMMUNICATION EQ.	17.44	20.30	22.57	24.75	26.34	27.21	9.31
57. ELECTRONIC COMPONENTS & ACCESS.	6.05	7.28	8.27	9.34	10.27	10.86	12.39
58. MISC. ELECTRICAL MACH. & EQ.	0.10	0.12	0.13	0.14	0.16	0.16	9.58
59. MOTOR VEHICLES & EQUIPMENT	0.20	0.24	0.28	0.33	0.39	0.46	18.17
60. AIRCRAFT & PARTS	12.02	13.66	15.13	16.78	18.03	18.60	9.13
61. OTHER TRANSPORTATION EQ.	1.25	1.32	1.37	1.40	1.45	1.50	3.78
62. INSTRUMENTS & SUPPLIES	3.06	3.48	3.83	4.22	4.53	4.72	9.01
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.29	0.32	0.35	0.39	0.42	0.45	8.88
64. MISC. MANUFACTURING	0.03	0.03	0.04	0.04	0.04	0.04	5.78
65. TRANSPORTATION & WAREHOUSING	0.25	0.26	0.27	0.29	0.30	0.30	4.14
66. COMMUNICATION EXC. RADIO & TV	0.71	0.77	0.82	0.90	0.96	0.99	6.67
67. RADIO & TV BROADCASTING	0.33	0.37	0.39	0.42	0.44	0.46	6.63
68. UTILITIES	0.76	0.83	0.90	0.97	1.03	1.05	6.75
69. WHOLESALE & RETAIL TRADE	0.70	0.80	0.89	1.00	1.09	1.15	10.32
70. FINANCE & INSURANCE	0.01	0.01	0.02	0.02	0.02	0.02	10.86
71. REAL ESTATE & RENTAL	0.02	0.02	0.02	0.02	0.02	0.03	9.02
72. PERSONAL SERVICES EXC. AUTO.	0.60	0.70	0.78	0.88	0.97	1.05	11.87
73. BUSINESS SERVICES	2.88	3.27	3.62	4.03	4.36	4.57	9.68
76. AMUSEMENTS	0.04	0.05	0.05	0.05	0.06	0.06	7.58
77. MISC. SERVICES	1.66	1.71	1.79	1.90	2.00	2.05	4.33
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	1.57	1.65	1.74	1.84	1.91	1.94	4.39
82. GOVERNMENT INDUSTRY	29.76	29.38	30.14	31.17	31.88	32.29	1.64
TOTAL, ALL INDUSTRIES	98.51	107.92	116.79	126.51	134.10	138.76	7.09
TOTAL EMPLOYMENT							
2. OTHER AGRICULTURAL PRODUCTS	3.98	4.00	4.02	4.00	4.00	3.99	0.05
4. AGR.,FORESTRY,&FISHERY SERV.	2.30	2.36	2.39	2.44	2.47	2.51	1.76
5. IRON ORE MINING	0.38	0.40	0.43	0.43	0.42	0.41	1.74
6. NONFERROUS METAL MINING	1.61	1.69	1.75	1.79	1.77	1.77	1.92

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
19. ENGINEERING&SCIENCE TECHNICIANS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
7. COAL MINING	2.30	2.45	2.58	2.67	2.79	2.88	4.57
8. CRUDE PETROLEUM & N. GAS	8.71	8.80	8.88	8.81	8.78	8.95	0.55
9. STONE&CLAY MINING & QUARRYING	0.67	0.68	0.71	0.74	0.76	0.76	2.68
10. CHEM&FERTILIZER MIN. MINING	0.49	0.51	0.52	0.54	0.54	0.54	2.01
11. NEW CONSTRUCTION	36.52	37.71	38.88	40.52	41.90	42.86	3.25
13. ORDNANCE & ACCESSORIES	13.15	13.59	13.97	14.43	14.76	15.05	2.73
14. FOOD & KINDRED PRODUCTS	10.00	10.24	10.40	10.47	10.47	10.49	0.95
16. FABRIC,YARN & THREAD MILLS	2.45	2.53	2.62	2.69	2.73	2.75	2.36
17. MISC. TEXTILE GOODS	1.20	1.25	1.30	1.34	1.36	1.37	2.74
19. MISC. FABRICATED TEXTILE PROD.	0.22	0.23	0.24	0.24	0.24	0.25	1.85
20. LUMBER & WOOD PRODUCTS	4.20	4.58	4.79	5.00	5.08	5.06	3.80
21. WOOD CONTAINERS	0.09	0.09	0.10	0.10	0.10	0.10	1.25
23. OTHER FURNITURE & FIXTURES	1.82	1.85	1.93	2.00	2.06	2.12	3.04
24. PAPER & ALLIED PRODUCTS	3.21	3.30	3.33	3.33	3.33	3.32	0.65
25. PAPERBOARD CONTAINERS & BOXES	0.33	0.34	0.35	0.35	0.36	0.36	1.67
26. PRINTING & PUBLISHING	2.02	2.03	2.04	2.06	2.07	2.08	0.57
27. CHEMICALS & PRODUCTS	20.78	21.34	21.82	22.19	22.47	22.73	1.81
28. PLASTICS & SYNTHETIC MATLS.	7.27	7.60	7.94	8.20	8.38	8.47	3.10
29. DRUGS,CLEANING & TOILET PREP.	14.18	14.42	14.79	15.12	15.27	15.45	1.73
30. PAINTS & ALLIED PRODUCTS	1.19	1.27	1.33	1.39	1.43	1.47	4.21
31. PET REFINING & REL. PROD.	5.09	5.11	5.18	5.26	5.31	5.34	0.96
32. RUBBER & MISC. PLASTICS PROD.	8.77	9.11	9.53	9.87	10.16	10.29	3.25
35. GLASS & GLASS PRODUCTS	1.52	1.54	1.56	1.57	1.55	1.54	0.22
36. STONE & CLAY PRODUCTS	4.79	4.89	4.98	5.12	5.15	5.10	1.26
37. PRIMARY FERROUS METALS	6.84	7.09	7.34	7.46	7.52	7.51	1.87
38. NONFERROUS METALS	5.20	5.44	5.71	5.93	6.07	6.21	3.61
40. FAB. STRUCTURAL METAL PRODUCTS	16.21	16.48	17.11	17.90	18.50	18.96	3.19
41. SCREW MACHINE PROD.&STAMPINGS	2.25	2.38	2.47	2.53	2.56	2.58	2.80
42. OTHER FAB. METAL PRODUCTS	5.11	5.34	5.65	5.89	6.09	6.30	4.26
43. ENGINES & TURBINES	3.49	3.63	3.81	3.88	3.94	3.98	2.71
44. FARM & GARDEN MACHINERY	2.96	3.07	3.27	3.35	3.42	3.49	3.36
45. CONSTR. & MINING MACHINERY	9.58	10.31	11.04	11.62	12.11	12.42	5.33
46. MATERIALS HANDLING MACH. & EQ.	3.42	3.60	3.88	4.11	4.28	4.43	5.31
47. METALWORKING MACH. & EQ.	9.20	9.63	10.26	10.73	11.10	11.36	4.31
48. SPECIAL INDUSTRY MACHINERY	7.07	7.28	7.71	8.12	8.38	8.62	4.04
49. GENERAL INDUSTRY MACHINERY	10.19	10.53	11.11	11.49	11.77	12.04	3.39
50. MISC. NONELECTRICAL MACH.	2.26	2.34	2.45	2.52	2.56	2.60	2.82
51. OFFICE,COMPUTING & ACCT. MACH.	38.06	40.42	42.94	44.50	45.87	47.62	4.58
52. SERVICE INDUSTRY MACHINES	4.46	4.67	4.92	5.03	5.06	5.09	2.68

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
19. ENGINEERING&SCIENCE TECHNICIANS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
53. ELECTRICAL MACHINERY	13.03	13.41	14.16	14.62	14.92	15.15	3.06
54. HOUSEHOLD APPLIANCES	2.18	2.24	2.30	2.38	2.43	2.46	2.48
55. ELECTRIC LIGHTING & WIRING EQ.	3.30	3.35	3.46	3.57	3.65	3.72	2.44
56. RADIO,TV, & COMMUNICATION EQ.	41.28	42.76	44.62	45.90	46.81	48.08	3.09
57. ELECTRONIC COMPONENTS & ACCESS.	27.64	29.11	30.85	32.39	33.61	34.60	4.60
58. MISC. ELECTRICAL MACH. & EQ.	3.85	3.99	4.14	4.19	4.25	4.28	2.13
59. MOTOR VEHICLES & EQUIPMENT	10.41	10.99	11.47	11.76	11.98	12.15	3.13
60. AIRCRAFT & PARTS	24.07	25.16	25.97	26.92	27.12	27.23	2.50
61. OTHER TRANSPORTATION EQ.	4.30	4.45	4.62	4.74	4.77	4.83	2.36
62. INSTRUMENTS & SUPPLIES	26.33	27.00	28.28	29.59	30.58	31.29	3.51
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	6.73	6.85	7.16	7.50	7.78	8.00	3.50
64. MISC. MANUFACTURING	2.78	2.81	2.90	2.97	3.01	3.03	1.75
65. TRANSPORTATION & WAREHOUSING	5.81	5.92	6.03	6.16	6.19	6.17	1.23
66. COMMUNICATION EXC. RADIO & TV	28.78	29.44	30.59	31.34	32.51	33.23	2.92
67. RADIO & TV BROADCASTING	16.68	16.92	17.12	17.11	17.01	16.92	0.29
68. UTILITIES	35.24	35.55	35.83	36.09	36.38	36.61	0.76
69. WHOLESALE & RETAIL TRADE	115.21	119.75	124.31	128.31	131.62	135.05	3.23
70. FINANCE & INSURANCE	1.50	1.55	1.61	1.67	1.74	1.80	3.68
71. REAL ESTATE & RENTAL	0.61	0.63	0.64	0.66	0.68	0.69	2.61
72. PERSONAL SERVICES EXC. AUTO.	32.[illegible]5	34.28	36.17	38.07	39.97	41.79	5.12
73. BUSINESS SERVICES	59.34	61.88	64.67	67.85	70.65	73.01	4.23
76. AMUSEMENTS	4.28	4.31	4.39	4.46	4.54	4.60	1.45
77. MISC. SERVICES	257.22	261.34	266.19	272.93	280.65	289.20	2.37
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	15.79	16.18	16.67	17.15	17.57	17.98	2.63
82. GOVERNMENT INDUSTRY	228.12	228.21	230.87	235.12	239.40	243.80	1.34
TOTAL, ALL INDUSTRIES	1,257.28	1,288.97	1,327.85	1,366.06	1,399.61	1,431.80	2.63

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
20. CIVIL ENGINEERING TECHNICIANS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
77. MISC. SERVICES	0.18	0.18	0.19	0.20	0.21	0.22	4.52
TOTAL, ALL INDUSTRIES	0.18	0.18	0.19	0.20	0.22	0.22	4.53
TOTAL EMPLOYMENT							
77. MISC. SERVICES	27.39	27.88	28.45	29.23	30.11	31.08	2.56
TOTAL, ALL INDUSTRIES	27.48	27.98	28.55	29.33	30.21	31.18	2.56

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
21. DRAFTERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
4. AGR.,FORESTRY,&FISHERY SERV.	0.01	0.01	0.01	0.01	0.01	0.01	6.85
6. NONFERROUS METAL MINING	0.02	0.03	0.03	0.03	0.03	0.04	10.39
7. COAL MINING	0.02	0.03	0.03	0.03	0.04	0.04	11.46
8. CRUDE PETROLEUM & N. GAS	0.22	0.24	0.25	0.27	0.28	0.29	5.94
11. NEW CONSTRUCTION	0.71	0.81	0.88	0.98	1.07	1.13	9.86
13. ORDNANCE & ACCESSORIES	1.10	1.26	1.38	1.51	1.61	1.69	8.93
20. LUMBER & WOOD PRODUCTS	0.03	0.04	0.04	0.05	0.05	0.06	12.64
23. OTHER FURNITURE & FIXTURES	0.02	0.03	0.03	0.03	0.03	0.03	5.71
24. PAPER & ALLIED PRODUCTS	0.01	0.01	0.01	0.01	0.02	0.02	6.43
26. PRINTING & PUBLISHING	0.01	0.01	0.01	0.01	0.01	0.01	6.73
27. CHEMICALS & PRODUCTS	0.08	0.09	0.10	0.11	0.11	0.12	7.61
28. PLASTICS & SYNTHETIC MATLS.	0.02	0.02	0.03	0.03	0.03	0.03	8.71
31. PET REFINING & REL. PROD.	0.04	0.04	0.04	0.04	0.05	0.05	5.26
32. RUBBER & MISC. PLASTICS PROD.	0.04	0.04	0.05	0.05	0.06	0.06	10.54
35. GLASS & GLASS PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.02	9.93
36. STONE & CLAY PRODUCTS	0.06	0.06	0.07	0.08	0.08	0.09	9.87
37. PRIMARY FERROUS METALS	0.12	0.13	0.15	0.16	0.17	0.18	8.45
38. NONFERROUS METALS	0.11	0.12	0.14	0.15	0.16	0.17	9.57
40. FAB. STRUCTURAL METAL PRODUCTS	0.59	0.68	0.74	0.80	0.86	0.92	9.16
41. SCREW MACHINE PROD.&STAMPINGS	0.07	0.08	0.09	0.10	0.11	0.11	8.91
42. OTHER FAB. METAL PRODUCTS	0.14	0.17	0.19	0.21	0.23	0.24	11.15
43. ENGINES & TURBINES	0.09	0.10	0.11	0.12	0.13	0.14	8.18
45. CONSTR. & MINING MACHINERY	0.07	0.08	0.08	0.09	0.10	0.10	9.42
46. MATERIALS HANDLING MACH. & EQ.	0.11	0.13	0.15	0.17	0.18	0.19	11.33
47. METALWORKING MACH. & EQ.	0.31	0.36	0.39	0.44	0.48	0.50	10.09
48. SPECIAL INDUSTRY MACHINERY	0.03	0.04	0.04	0.05	0.05	0.06	13.00
49. GENERAL INDUSTRY MACHINERY	0.22	0.25	0.27	0.29	0.31	0.33	8.25
50. MISC. NONELECTRICAL MACH.	0.17	0.18	0.21	0.23	0.24	0.25	8.50
51. OFFICE,COMPUTING & ACCT. MACH.	0.17	0.20	0.22	0.24	0.25	0.26	8.11
52. SERVICE INDUSTRY MACHINES	0.04	0.05	0.06	0.07	0.08	0.09	14.51
53. ELECTRICAL MACHINERY	0.24	0.27	0.30	0.33	0.36	0.38	10.05
55. ELECTRIC LIGHTING & WIRING EQ.	0.06	0.07	0.08	0.08	0.09	0.10	10.29
56. RADIO,TV, & COMMUNICATION EQ.	2.88	3.35	3.72	4.08	4.34	4.48	9.21
57. ELECTRONIC COMPONENTS & ACCESS.	0.68	0.82	0.93	1.06	1.16	1.23	12.56
58. MISC. ELECTRICAL MACH. & EQ.	0.02	0.02	0.03	0.03	0.03	0.03	9.57
59. MOTOR VEHICLES & EQUIPMENT	0.05	0.06	0.07	0.08	0.09	0.11	18.74
60. AIRCRAFT & PARTS	1.93	2.19	2.41	2.66	2.84	2.92	8.59

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
21. DRAFTERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
61. OTHER TRANSPORTATION EQ.	0.77	0.82	0.85	0.88	0.91	0.94	4.10
62. INSTRUMENTS & SUPPLIES	0.71	0.81	0.89	0.99	1.07	1.12	9.53
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.06	0.07	0.08	0.08	0.09	0.10	9.80
64. MISC. MANUFACTURING	0.01	0.01	0.01	0.01	0.01	0.01	4.89
65. TRANSPORTATION & WAREHOUSING	0.03	0.03	0.03	0.03	0.03	0.04	3.66
66. COMMUNICATION EXC. RADIO & TV	0.13	0.14	0.15	0.16	0.17	0.18	5.59
68. UTILITIES	0.27	0.30	0.32	0.34	0.36	0.37	6.70
69. WHOLESALE & RETAIL TRADE	0.04	0.05	0.06	0.07	0.08	0.09	14.15
71. REAL ESTATE & RENTAL	0.01	0.01	0.01	0.01	0.02	0.02	9.05
72. PERSONAL SERVICES EXC. AUTO.	0.02	0.02	0.02	0.03	0.03	0.03	12.01
73. BUSINESS SERVICES	0.87	1.00	1.11	1.25	1.36	1.43	10.50
77. MISC. SERVICES	0.72	0.74	0.77	0.82	0.86	0.88	4.11
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.31	0.34	0.36	0.38	0.40	0.41	5.85
82. GOVERNMENT INDUSTRY	1.05	1.03	1.06	1.10	1.13	1.15	1.85
TOTAL, ALL INDUSTRIES	15.56	17.50	19.12	20.92	22.36	23.30	8.40

TOTAL EMPLOYMENT

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
4. AGR.,FORESTRY,&FISHERY SERV.	0.35	0.36	0.37	0.37	0.38	0.39	1.76
6. NONFERROUS METAL MINING	0.37	0.39	0.41	0.41	0.41	0.41	1.86
7. COAL MINING	0.84	0.90	0.96	1.01	1.06	1.10	5.64
8. CRUDE PETROLEUM & N. GAS	2.95	3.00	3.05	3.04	3.04	3.12	1.08
11. NEW CONSTRUCTION	18.82	19.45	20.08	20.95	21.68	22.20	3.36
13. ORDNANCE & ACCESSORIES	1.82	1.88	1.93	2.00	2.04	2.08	2.77
20. LUMBER & WOOD PRODUCTS	1.58	1.78	1.91	2.05	2.14	2.18	6.63
23. OTHER FURNITURE & FIXTURES	1.51	1.54	1.61	1.68	1.73	1.78	3.27
24. PAPER & ALLIED PRODUCTS	0.63	0.64	0.65	0.65	0.65	0.65	0.61
26. PRINTING & PUBLISHING	0.62	0.63	0.64	0.65	0.65	0.66	1.08
27. CHEMICALS & PRODUCTS	1.72	1.76	1.78	1.80	1.81	1.82	1.10
28. PLASTICS & SYNTHETIC MATLS.	0.90	0.94	0.97	1.00	1.01	1.01	2.31
31. PET REFINING & REL. PROD.	0.69	0.69	0.70	0.70	0.71	0.71	0.32
32. RUBBER & MISC. PLASTICS PROD.	1.41	1.46	1.53	1.58	1.62	1.64	3.09
35. GLASS & GLASS PRODUCTS	0.43	0.44	0.45	0.46	0.46	0.46	1.18
36. STONE & CLAY PRODUCTS	1.72	1.78	1.84	1.91	1.94	1.95	2.53
37. PRIMARY FERROUS METALS	1.67	1.74	1.80	1.83	1.85	1.85	2.04
38. NONFERROUS METALS	1.28	1.33	1.39	1.44	1.46	1.49	2.97
40. FAB. STRUCTURAL METAL PRODUCTS	13.30	13.54	14.08	14.76	15.28	15.68	3.34
41. SCREW MACHINE PROD.&STAMPINGS	1.21	1.29	1.35	1.39	1.41	1.43	3.31
42. OTHER FAB. METAL PRODUCTS	3.13	3.28	3.47	3.62	3.75	3.88	4.36

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
21. DRAFTERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
43. ENGINES & TURBINES	1.10	1.14	1.18	1.20	1.21	1.22	2.21
45. CONSTR. & MINING MACHINERY	5.61	6.07	6.52	6.89	7.21	7.42	5.75
46. MATERIALS HANDLING MACH. & EQ.	2.00	2.12	2.29	2.44	2.55	2.65	5.73
47. METALWORKING MACH. & EQ.	6.00	6.29	6.71	7.03	7.28	7.46	4.46
48. SPECIAL INDUSTRY MACHINERY	4.30	4.43	4.69	4.94	5.11	5.25	4.09
49. GENERAL INDUSTRY MACHINERY	5.05	5.21	5.50	5.68	5.82	5.95	3.33
50. MISC. NONELECTRICAL MACH.	1.47	1.52	1.60	1.65	1.68	1.72	3.14
51. OFFICE,COMPUTING & ACCT. MACH.	4.60	4.83	5.07	5.20	5.31	5.46	3.49
52. SERVICE INDUSTRY MACHINES	2.47	2.60	2.75	2.82	2.86	2.88	3.13
53. ELECTRICAL MACHINERY	4.73	4.86	5.13	5.29	5.39	5.47	2.94
55. ELECTRIC LIGHTING & WIRING EQ.	1.26	1.30	1.36	1.42	1.46	1.50	3.61
56. RADIO,TV, & COMMUNICATION EQ.	6.83	7.06	7.36	7.57	7.71	7.91	3.00
57. ELECTRONIC COMPONENTS & ACCESS.	3.11	3.28	3.48	3.66	3.80	3.92	4.75
58. MISC. ELECTRICAL MACH. & EQ.	0.75	0.77	0.80	0.81	0.82	0.83	2.12
59. MOTOR VEHICLES & EQUIPMENT	2.43	2.58	2.71	2.79	2.85	2.90	3.62
60. AIRCRAFT & PARTS	3.87	4.03	4.14	4.27	4.28	4.27	2.00
61. OTHER TRANSPORTATION EQ.	2.66	2.77	2.89	2.97	3.00	3.04	2.68
62. INSTRUMENTS & SUPPLIES	6.08	6.27	6.60	6.94	7.20	7.40	4.00
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	1.42	1.45	1.53	1.62	1.69	1.75	4.37
64. MISC. MANUFACTURING	0.98	0.98	1.00	1.02	1.02	1.02	0.89
65. TRANSPORTATION & WAREHOUSING	0.69	0.70	0.71	0.73	0.72	0.72	0.76
66. COMMUNICATION EXC. RADIO & TV	5.40	5.46	5.61	5.69	5.85	5.92	1.87
68. UTILITIES	12.49	12.59	12.68	12.77	12.87	12.94	0.72
69. WHOLESALE & RETAIL TRADE	7.17	7.76	8.36	8.93	9.45	9.97	6.81
71. REAL ESTATE & RENTAL	0.38	0.39	0.40	0.41	0.42	0.43	2.64
72. PERSONAL SERVICES EXC. AUTO.	1.01	1.07	1.13	1.19	1.25	1.31	5.26
73. BUSINESS SERVICES	17.93	18.86	19.87	21.00	22.02	22.90	5.02
77. MISC. SERVICES	111.22	112.74	114.58	117.23	120.30	123.72	2.15
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	5.34	5.48	5.66	5.84	6.00	6.15	2.87
82. GOVERNMENT INDUSTRY	16.87	16.82	16.95	17.17	17.39	17.69	0.95
TOTAL, ALL INDUSTRIES	306.81	315.00	325.11	335.42	344.64	353.38	2.87

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
22. ELECTRICAL&ELECTRONIC TECHNICIANS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
8. CRUDE PETROLEUM & N. GAS	0.06	0.06	0.06	0.07	0.07	0.07	4.19
11. NEW CONSTRUCTION	0.46	0.52	0.57	0.64	0.69	0.74	10.02
13. ORDNANCE & ACCESSORIES	2.89	3.31	3.65	3.99	4.25	4.46	9.05
26. PRINTING & PUBLISHING	0.01	0.02	0.02	0.02	0.02	0.02	6.49
27. CHEMICALS & PRODUCTS	0.04	0.04	0.04	0.05	0.05	0.05	7.63
28. PLASTICS & SYNTHETIC MATLS.	0.01	0.01	0.01	0.01	0.01	0.02	8.70
31. PET REFINING & REL. PROD.	0.02	0.02	0.02	0.03	0.03	0.03	5.24
35. GLASS & GLASS PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	8.09
37. PRIMARY FERROUS METALS	0.04	0.05	0.05	0.06	0.06	0.06	6.98
38. NONFERROUS METALS	0.05	0.06	0.07	0.07	0.08	0.08	9.94
40. FAB. STRUCTURAL METAL PRODUCTS	0.02	0.02	0.02	0.02	0.02	0.03	7.74
42. OTHER FAB. METAL PRODUCTS	0.01	0.02	0.02	0.02	0.02	0.02	10.03
43. ENGINES & TURBINES	0.03	0.04	0.04	0.05	0.05	0.05	9.14
45. CONSTR. & MINING MACHINERY	0.01	0.01	0.01	0.01	0.01	0.01	7.25
46. MATERIALS HANDLING MACH. & EQ.	0.01	0.01	0.01	0.02	0.02	0.02	9.13
47. METALWORKING MACH. & EQ.	0.07	0.07	0.08	0.09	0.10	0.10	9.36
48. SPECIAL INDUSTRY MACHINERY	0.01	0.01	0.01	0.01	0.01	0.01	12.06
49. GENERAL INDUSTRY MACHINERY	0.05	0.06	0.06	0.07	0.07	0.07	7.51
50. MISC. NONELECTRICAL MACH.	0.02	0.02	0.03	0.03	0.03	0.03	7.54
51. OFFICE,COMPUTING & ACCT. MACH.	1.16	1.36	1.51	1.65	1.75	1.83	9.45
52. SERVICE INDUSTRY MACHINES	0.01	0.01	0.01	0.02	0.02	0.02	13.37
53. ELECTRICAL MACHINERY	0.27	0.31	0.34	0.38	0.41	0.44	10.17
55. ELECTRIC LIGHTING & WIRING EQ.	0.04	0.05	0.05	0.06	0.06	0.07	8.24
56. RADIO,TV, & COMMUNICATION EQ.	11.22	13.06	14.52	15.93	16.95	17.52	9.31
57. ELECTRONIC COMPONENTS & ACCESS.	3.83	4.60	5.24	5.91	6.51	6.88	12.43
58. MISC. ELECTRICAL MACH. & EQ.	0.04	0.05	0.05	0.06	0.06	0.06	9.58
59. MOTOR VEHICLES & EQUIPMENT	0.01	0.01	0.01	0.02	0.02	0.02	17.13
60. AIRCRAFT & PARTS	2.28	2.60	2.89	3.22	3.48	3.60	9.57
61. OTHER TRANSPORTATION EQ.	0.10	0.10	0.11	0.11	0.11	0.12	3.40
62. INSTRUMENTS & SUPPLIES	1.42	1.60	1.76	1.93	2.07	2.15	8.69
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.09	0.10	0.11	0.12	0.13	0.14	8.59
64. MISC. MANUFACTURING	0.01	0.01	0.01	0.01	0.01	0.01	6.22
65. TRANSPORTATION & WAREHOUSING	0.16	0.16	0.17	0.18	0.19	0.19	4.60
66. COMMUNICATION EXC. RADIO & TV	0.45	0.48	0.52	0.57	0.61	0.64	7.19
67. RADIO & TV BROADCASTING	0.04	0.04	0.05	0.05	0.06	0.06	10.41
68. UTILITIES	0.24	0.27	0.29	0.31	0.33	0.34	7.03
69. WHOLESALE & RETAIL TRADE	0.63	0.72	0.80	0.89	0.97	1.02	10.10

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
22. ELECTRICAL&ELECTRONIC TECHNICIANS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
72. PERSONAL SERVICES EXC. AUTO.	0.56	0.65	0.73	0.83	0.91	0.98	11.95
73. BUSINESS SERVICES	1.12	1.28	1.43	1.60	1.75	1.84	10.55
76. AMUSEMENTS	0.01	0.01	0.01	0.01	0.01	0.02	7.94
77. MISC. SERVICES	0.10	0.10	0.10	0.11	0.11	0.12	3.74
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.16	0.17	0.19	0.20	0.20	0.21	5.21
82. GOVERNMENT INDUSTRY	9.08	8.96	9.19	9.50	9.71	9.83	1.60
TOTAL, ALL INDUSTRIES	36.86	41.11	44.90	48.93	52.06	54.00	7.94
TOTAL EMPLOYMENT							
8. CRUDE PETROLEUM & N. GAS	0.77	0.77	0.77	0.75	0.74	0.75	-0.59
11. NEW CONSTRUCTION	12.16	12.59	13.02	13.60	14.09	14.45	3.51
13. ORDNANCE & ACCESSORIES	4.78	4.95	5.10	5.27	5.40	5.51	2.88
26. PRINTING & PUBLISHING	0.94	0.95	0.96	0.97	0.97	0.98	0.85
27. CHEMICALS & PRODUCTS	0.73	0.75	0.76	0.77	0.77	0.78	1.11
28. PLASTICS & SYNTHETIC MATLS.	0.43	0.44	0.46	0.47	0.47	0.48	2.31
31. PET REFINING & REL. PROD.	0.40	0.40	0.40	0.40	0.40	0.40	0.30
35. GLASS & GLASS PRODUCTS	0.28	0.28	0.28	0.28	0.28	0.27	-0.51
37. PRIMARY FERROUS METALS	0.63	0.64	0.66	0.66	0.66	0.65	0.66
38. NONFERROUS METALS	0.62	0.65	0.68	0.70	0.72	0.73	3.31
40. FAB. STRUCTURAL METAL PRODUCTS	0.39	0.39	0.40	0.41	0.42	0.43	2.00
42. OTHER FAB. METAL PRODUCTS	0.31	0.32	0.33	0.34	0.35	0.36	3.31
43. ENGINES & TURBINES	0.41	0.43	0.45	0.46	0.47	0.47	3.12
45. CONSTR. & MINING MACHINERY	0.57	0.60	0.64	0.66	0.68	0.68	3.65
46. MATERIALS HANDLING MACH. & EQ.	0.20	0.21	0.22	0.23	0.24	0.24	3.63
47. METALWORKING MACH. & EQ.	1.27	1.32	1.40	1.45	1.50	1.52	3.76
48. SPECIAL INDUSTRY MACHINERY	1.17	1.20	1.26	1.31	1.34	1.37	3.21
49. GENERAL INDUSTRY MACHINERY	1.19	1.22	1.28	1.31	1.33	1.35	2.62
50. MISC. NONELECTRICAL MACH.	0.20	0.20	0.21	0.22	0.22	0.22	2.23
51. OFFICE,COMPUTING & ACCT. MACH.	30.89	32.87	34.98	36.32	37.49	38.98	4.76
52. SERVICE INDUSTRY MACHINES	0.59	0.62	0.65	0.66	0.66	0.66	2.11
53. ELECTRICAL MACHINERY	5.40	5.55	5.86	6.05	6.17	6.27	3.05
55. ELECTRIC LIGHTING & WIRING EQ.	0.92	0.93	0.95	0.98	0.99	1.00	1.69
56. RADIO,TV, & COMMUNICATION EQ.	26.57	27.52	28.72	29.54	30.13	30.95	3.10
57. ELECTRONIC COMPONENTS & ACCESS.	17.48	18.42	19.53	20.51	21.29	21.93	4.63
58. MISC. ELECTRICAL MACH. & EQ.	1.48	1.54	1.60	1.62	1.64	1.65	2.13
59. MOTOR VEHICLES & EQUIPMENT	0.48	0.50	0.52	0.53	0.53	0.54	2.22
60. AIRCRAFT & PARTS	4.56	4.79	4.97	5.17	5.23	5.27	2.91
61. OTHER TRANSPORTATION EQ.	0.34	0.35	0.36	0.37	0.37	0.37	1.99

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
22. ELECTRICAL&ELECTRONIC TECHNICIANS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
62. INSTRUMENTS & SUPPLIES	12.17	12.44	12.98	13.55	13.96	14.25	3.20
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	2.16	2.19	2.29	2.39	2.47	2.54	3.23
64. MISC. MANUFACTURING	0.75	0.76	0.79	0.81	0.82	0.83	2.18
65. TRANSPORTATION & WAREHOUSING	3.66	3.75	3.83	3.93	3.96	3.97	1.68
66. COMMUNICATION EXC. RADIO & TV	18.09	18.60	19.42	20.00	20.84	21.40	3.42
67. RADIO & TV BROADCASTING	1.81	1.91	2.00	2.07	2.13	2.18	3.85
68. UTILITIES	11.18	11.31	11.42	11.54	11.66	11.76	1.03
69. WHOLESALE & RETAIL TRADE	103.21	107.04	110.89	114.24	116.98	119.82	3.03
72. PERSONAL SERVICES EXC. AUTO.	30.48	32.12	33.92	35.73	37.54	39.28	5.20
73. BUSINESS SERVICES	23.01	24.22	25.53	26.99	28.31	29.46	5.07
76. AMUSEMENTS	1.07	1.08	1.11	1.13	1.15	1.17	1.79
77. MISC. SERVICES	14.93	15.08	15.27	15.57	15.92	16.32	1.79
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	1.49	1.54	1.60	1.66	1.71	1.75	3.31
82. GOVERNMENT INDUSTRY	41.40	41.58	42.26	43.29	44.32	45.21	1.78
TOTAL, ALL INDUSTRIES	382.81	396.28	412.01	426.24	438.68	450.55	3.31

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE
BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
23. INDUSTRIAL ENGINEERING TECHNICIANS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	0.24	0.27	0.29	0.31	0.33	0.34	7.36
27. CHEMICALS & PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	7.18
31. PET REFINING & REL. PROD.	0.01	0.01	0.01	0.01	0.01	0.01	5.19
32. RUBBER & MISC. PLASTICS PROD.	0.02	0.02	0.03	0.03	0.03	0.03	11.25
36. STONE & CLAY PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	8.41
37. PRIMARY FERROUS METALS	0.09	0.10	0.11	0.12	0.13	0.13	7.61
38. NONFERROUS METALS	0.02	0.02	0.02	0.03	0.03	0.03	9.26
40. FAB. STRUCTURAL METAL PRODUCTS	0.02	0.02	0.02	0.02	0.02	0.02	8.06
42. OTHER FAB. METAL PRODUCTS	0.01	0.01	0.01	0.02	0.02	0.02	10.01
43. ENGINES & TURBINES	0.02	0.02	0.03	0.03	0.03	0.03	7.71
45. CONSTR. & MINING MACHINERY	0.01	0.01	0.01	0.01	0.02	0.02	8.91
46. MATERIALS HANDLING MACH. & EQ.	0.02	0.02	0.02	0.03	0.03	0.03	10.81
47. METALWORKING MACH. & EQ.	0.04	0.04	0.05	0.05	0.06	0.06	10.58
49. GENERAL INDUSTRY MACHINERY	0.04	0.04	0.04	0.05	0.05	0.06	9.31
50. MISC. NONELECTRICAL MACH.	0.02	0.02	0.03	0.03	0.03	0.03	7.54
51. OFFICE,COMPUTING & ACCT. MACH.	0.03	0.03	0.04	0.04	0.04	0.05	9.13
53. ELECTRICAL MACHINERY	0.04	0.05	0.06	0.06	0.07	0.07	10.78
55. ELECTRIC LIGHTING & WIRING EQ.	0.01	0.01	0.01	0.01	0.02	0.02	8.22
56. RADIO,TV, & COMMUNICATION EQ.	0.44	0.51	0.57	0.63	0.67	0.70	9.78
57. ELECTRONIC COMPONENTS & ACCESS.	0.09	0.10	0.12	0.13	0.14	0.15	11.36
59. MOTOR VEHICLES & EQUIPMENT	0.01	0.01	0.02	0.02	0.02	0.03	18.69
60. AIRCRAFT & PARTS	0.60	0.69	0.76	0.85	0.91	0.94	9.34
61. OTHER TRANSPORTATION EQ.	0.12	0.13	0.13	0.13	0.14	0.14	3.09
62. INSTRUMENTS & SUPPLIES	0.07	0.08	0.09	0.10	0.11	0.11	9.57
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.01	0.01	0.01	0.01	0.01	0.01	8.51
68. UTILITIES	0.01	0.01	0.01	0.01	0.01	0.02	5.83
73. BUSINESS SERVICES	0.05	0.06	0.06	0.06	0.07	0.07	6.88
77. MISC. SERVICES	0.03	0.03	0.03	0.03	0.03	0.03	4.93
82. GOVERNMENT INDUSTRY	2.15	2.12	2.17	2.23	2.28	2.30	1.34
TOTAL, ALL INDUSTRIES	4.28	4.54	4.83	5.15	5.40	5.55	5.33
TOTAL EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	0.39	0.40	0.40	0.41	0.42	0.42	1.28
27. CHEMICALS & PRODUCTS	0.14	0.14	0.14	0.14	0.14	0.14	0.69
31. PET REFINING & REL. PROD.	0.12	0.12	0.12	0.12	0.12	0.12	0.25
32. RUBBER & MISC. PLASTICS PROD.	0.74	0.78	0.82	0.85	0.88	0.89	3.76

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
23. INDUSTRIAL ENGINEERING TECHNICIANS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
36. STONE & CLAY PRODUCTS	0.21	0.21	0.21	0.22	0.22	0.22	1.17
37. PRIMARY FERROUS METALS	1.27	1.31	1.35	1.36	1.36	1.36	1.25
38. NONFERROUS METALS	0.23	0.24	0.25	0.26	0.26	0.26	2.67
40. FAB. STRUCTURAL METAL PRODUCTS	0.35	0.35	0.36	0.37	0.38	0.39	2.30
42. OTHER FAB. METAL PRODUCTS	0.24	0.25	0.26	0.27	0.28	0.28	3.30
43. ENGINES & TURBINES	0.26	0.27	0.28	0.28	0.28	0.28	1.77
45. CONSTR. & MINING MACHINERY	0.90	0.96	1.03	1.08	1.13	1.16	5.25
46. MATERIALS HANDLING MACH. & EQ.	0.32	0.34	0.36	0.38	0.40	0.41	5.23
47. METALWORKING MACH. & EQ.	0.71	0.75	0.81	0.85	0.88	0.91	4.92
49. GENERAL INDUSTRY MACHINERY	0.81	0.85	0.91	0.95	0.98	1.01	4.34
50. MISC. NONELECTRICAL MACH.	0.19	0.20	0.21	0.21	0.21	0.22	2.23
51. OFFICE,COMPUTING & ACCT. MACH.	0.79	0.83	0.88	0.91	0.94	0.98	4.46
53. ELECTRICAL MACHINERY	0.89	0.92	0.98	1.02	1.04	1.07	3.62
55. ELECTRIC LIGHTING & WIRING EQ.	0.23	0.23	0.23	0.24	0.24	0.25	1.68
56. RADIO,TV, & COMMUNICATION EQ.	1.03	1.07	1.13	1.16	1.19	1.23	3.54
57. ELECTRONIC COMPONENTS & ACCESS.	0.40	0.41	0.44	0.45	0.47	0.48	3.64
59. MOTOR VEHICLES & EQUIPMENT	0.62	0.65	0.68	0.70	0.72	0.73	3.58
60. AIRCRAFT & PARTS	1.21	1.27	1.31	1.36	1.38	1.38	2.70
61. OTHER TRANSPORTATION EQ.	0.42	0.43	0.44	0.45	0.45	0.45	1.68
62. INSTRUMENTS & SUPPLIES	0.63	0.65	0.68	0.71	0.74	0.76	4.04
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.14	0.14	0.15	0.15	0.16	0.16	3.15
68. UTILITIES	0.53	0.53	0.53	0.53	0.53	0.52	-0.11
73. BUSINESS SERVICES	1.03	1.05	1.06	1.09	1.11	1.12	1.57
77. MISC. SERVICES	4.13	4.23	4.33	4.47	4.62	4.78	2.96
82. GOVERNMENT INDUSTRY	6.83	6.81	6.86	6.96	7.07	7.17	0.99
TOTAL, ALL INDUSTRIES	30.24	31.00	32.02	32.89	33.58	34.20	2.49

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
24. MECHANICAL ENGINEERING TECHNICIANS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	1.42	1.63	1.81	1.98	2.12	2.23	9.54
27. CHEMICALS & PRODUCTS	0.17	0.19	0.20	0.22	0.24	0.26	9.20
28. PLASTICS & SYNTHETIC MATLS.	0.01	0.01	0.01	0.01	0.01	0.01	8.69
36. STONE & CLAY PRODUCTS	0.01	0.01	0.01	0.01	0.02	0.02	8.32
37. PRIMARY FERROUS METALS	0.02	0.02	0.02	0.03	0.03	0.03	8.32
38. NONFERROUS METALS	0.03	0.03	0.04	0.04	0.05	0.05	9.53
40. FAB. STRUCTURAL METAL PRODUCTS	0.04	0.04	0.04	0.05	0.05	0.05	7.60
41. SCREW MACHINE PROD.&STAMPINGS	0.01	0.01	0.02	0.02	0.02	0.02	7.72
42. OTHER FAB. METAL PRODUCTS	0.02	0.02	0.02	0.03	0.03	0.03	10.12
43. ENGINES & TURBINES	0.06	0.07	0.07	0.08	0.08	0.09	9.11
45. CONSTR. & MINING MACHINERY	0.02	0.02	0.02	0.02	0.03	0.03	8.19
46. MATERIALS HANDLING MACH. & EQ.	0.03	0.04	0.04	0.05	0.05	0.05	10.08
47. METALWORKING MACH. & EQ.	0.03	0.03	0.03	0.04	0.04	0.04	9.35
49. GENERAL INDUSTRY MACHINERY	0.08	0.09	0.10	0.11	0.12	0.13	9.07
50. MISC. NONELECTRICAL MACH.	0.02	0.02	0.03	0.03	0.03	0.03	7.53
51. OFFICE,COMPUTING & ACCT. MACH.	0.07	0.08	0.09	0.09	0.10	0.10	8.95
52. SERVICE INDUSTRY MACHINES	0.01	0.02	0.02	0.02	0.02	0.02	13.36
53. ELECTRICAL MACHINERY	0.04	0.05	0.05	0.06	0.06	0.07	9.12
55. ELECTRIC LIGHTING & WIRING EQ.	0.01	0.02	0.02	0.02	0.02	0.02	8.25
56. RADIO,TV, & COMMUNICATION EQ.	1.15	1.35	1.51	1.66	1.77	1.83	9.72
57. ELECTRONIC COMPONENTS & ACCESS.	0.33	0.39	0.45	0.51	0.56	0.60	12.86
58. MISC. ELECTRICAL MACH. & EQ.	0.01	0.01	0.02	0.02	0.02	0.02	9.55
59. MOTOR VEHICLES & EQUIPMENT	0.05	0.06	0.07	0.09	0.10	0.12	18.20
60. AIRCRAFT & PARTS	3.68	4.20	4.66	5.18	5.58	5.76	9.36
61. OTHER TRANSPORTATION EQ.	0.06	0.07	0.07	0.07	0.07	0.07	3.30
62. INSTRUMENTS & SUPPLIES	0.23	0.26	0.28	0.31	0.34	0.35	8.95
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.03	0.03	0.03	0.04	0.04	0.04	8.64
73. BUSINESS SERVICES	0.20	0.22	0.24	0.26	0.28	0.29	7.95
77. MISC. SERVICES	0.02	0.02	0.02	0.02	0.02	0.02	4.34
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.01	0.01	0.01	0.02	0.02	0.02	5.31
82. GOVERNMENT INDUSTRY	0.03	0.03	0.03	0.03	0.03	0.03	1.02
TOTAL, ALL INDUSTRIES	7.92	9.08	10.06	11.13	11.97	12.47	9.51
TOTAL EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	2.34	2.44	2.52	2.62	2.69	2.76	3.35
27. CHEMICALS & PRODUCTS	3.46	3.58	3.69	3.78	3.86	3.93	2.59

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
24. MECHANICAL ENGINEERING TECHNICIANS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
28. PLASTICS & SYNTHETIC MATLS.	0.34	0.35	0.36	0.37	0.38	0.38	2.29
36. STONE & CLAY PRODUCTS	0.34	0.34	0.35	0.36	0.36	0.36	1.08
37. PRIMARY FERROUS METALS	0.27	0.28	0.29	0.29	0.29	0.29	1.92
38. NONFERROUS METALS	0.35	0.37	0.38	0.40	0.40	0.41	2.92
40. FAB. STRUCTURAL METAL PRODUCTS	0.84	0.84	0.86	0.89	0.90	0.92	1.86
41. SCREW MACHINE PROD.&STAMPINGS	0.21	0.22	0.22	0.23	0.23	0.23	2.19
42. OTHER FAB. METAL PRODUCTS	0.39	0.40	0.42	0.44	0.45	0.46	3.40
43. ENGINES & TURBINES	0.69	0.73	0.76	0.78	0.80	0.81	3.10
45. CONSTR. & MINING MACHINERY	1.57	1.68	1.78	1.86	1.93	1.97	4.55
46. MATERIALS HANDLING MACH. & EQ.	0.56	0.59	0.63	0.66	0.68	0.70	4.53
47. METALWORKING MACH. & EQ.	0.51	0.54	0.57	0.59	0.61	0.62	3.75
49. GENERAL INDUSTRY MACHINERY	1.90	1.98	2.10	2.19	2.25	2.32	4.10
50. MISC. NONELECTRICAL MACH.	0.19	0.19	0.20	0.20	0.21	0.21	2.22
51. OFFICE,COMPUTING & ACCT. MACH.	1.78	1.88	1.99	2.06	2.12	2.19	4.29
52. SERVICE INDUSTRY MACHINES	0.73	0.76	0.80	0.81	0.81	0.81	2.10
53. ELECTRICAL MACHINERY	0.88	0.89	0.93	0.96	0.97	0.97	2.06
55. ELECTRIC LIGHTING & WIRING EQ.	0.29	0.30	0.30	0.31	0.32	0.32	1.70
56. RADIO,TV, & COMMUNICATION EQ.	2.73	2.84	2.98	3.07	3.15	3.24	3.48
57. ELECTRONIC COMPONENTS & ACCESS.	1.48	1.57	1.67	1.76	1.84	1.90	5.04
58. MISC. ELECTRICAL MACH. & EQ.	0.45	0.47	0.48	0.49	0.50	0.50	2.11
59. MOTOR VEHICLES & EQUIPMENT	2.74	2.89	3.02	3.09	3.16	3.20	3.16
60. AIRCRAFT & PARTS	7.38	7.73	8.00	8.31	8.39	8.44	2.72
61. OTHER TRANSPORTATION EQ.	0.21	0.22	0.23	0.23	0.23	0.24	1.89
62. INSTRUMENTS & SUPPLIES	1.95	2.00	2.10	2.19	2.26	2.32	3.46
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.65	0.66	0.68	0.72	0.74	0.76	3.27
73. BUSINESS SERVICES	4.06	4.16	4.28	4.42	4.53	4.62	2.59
77. MISC. SERVICES	2.56	2.61	2.68	2.76	2.86	2.96	2.97
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.07	0.07	0.07	0.08	0.08	0.08	3.08
82. GOVERNMENT INDUSTRY	1.12	1.12	1.14	1.18	1.21	1.23	2.05
TOTAL, ALL INDUSTRIES	44.83	46.53	48.41	50.06	51.19	52.16	3.08

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
25. ENGINEERING&SCIENCE TECH NEC
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
2. OTHER AGRICULTURAL PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	2.79
4. AGR.,FORESTRY,&FISHERY SERV.	0.04	0.04	0.04	0.04	0.05	0.05	6.86
5. IRON ORE MINING	0.02	0.02	0.02	0.02	0.02	0.02	7.83
6. NONFERROUS METAL MINING	0.07	0.08	0.09	0.10	0.11	0.12	10.48
7. COAL MINING	0.04	0.05	0.05	0.06	0.06	0.07	9.67
8. CRUDE PETROLEUM & N. GAS	0.37	0.40	0.41	0.44	0.47	0.47	5.23
9. STONE&CLAY MINING & QUARRYING	0.02	0.02	0.02	0.02	0.03	0.03	10.17
10. CHEM&FERTILIZER MIN. MINING	0.01	0.01	0.01	0.01	0.01	0.01	7.89
11. NEW CONSTRUCTION	0.21	0.24	0.25	0.28	0.30	0.32	8.71
13. ORDNANCE & ACCESSORIES	2.31	2.62	2.87	3.12	3.31	3.46	8.43
14. FOOD & KINDRED PRODUCTS	0.06	0.07	0.07	0.08	0.08	0.08	6.18
16. FABRIC,YARN & THREAD MILLS	0.03	0.03	0.03	0.04	0.04	0.04	5.79
17. MISC. TEXTILE GOODS	0.02	0.02	0.02	0.02	0.02	0.02	7.13
20. LUMBER & WOOD PRODUCTS	0.05	0.06	0.06	0.07	0.07	0.08	7.67
24. PAPER & ALLIED PRODUCTS	0.05	0.05	0.05	0.06	0.06	0.06	6.50
27. CHEMICALS & PRODUCTS	0.71	0.79	0.85	0.93	1.00	1.06	8.31
28. PLASTICS & SYNTHETIC MATLS.	0.13	0.15	0.17	0.19	0.20	0.21	9.80
29. DRUGS,CLEANING & TOILET PREP.	0.05	0.05	0.05	0.06	0.06	0.06	5.23
30. PAINTS & ALLIED PRODUCTS	0.06	0.07	0.07	0.08	0.09	0.09	9.59
31. PET REFINING & REL. PROD.	0.21	0.22	0.23	0.25	0.27	0.28	6.15
32. RUBBER & MISC. PLASTICS PROD.	0.18	0.20	0.23	0.25	0.28	0.30	10.68
35. GLASS & GLASS PRODUCTS	0.01	0.02	0.02	0.02	0.02	0.02	8.74
36. STONE & CLAY PRODUCTS	0.08	0.09	0.09	0.10	0.11	0.11	7.65
37. PRIMARY FERROUS METALS	0.21	0.24	0.26	0.29	0.31	0.32	8.70
38. NONFERROUS METALS	0.23	0.27	0.30	0.33	0.36	0.38	10.83
40. FAB. STRUCTURAL METAL PRODUCTS	0.06	0.07	0.07	0.08	0.09	0.09	8.83
41. SCREW MACHINE PROD.&STAMPINGS	0.04	0.05	0.05	0.06	0.06	0.06	7.71
42. OTHER FAB. METAL PRODUCTS	0.05	0.06	0.06	0.07	0.08	0.08	11.60
43. ENGINES & TURBINES	0.09	0.10	0.11	0.12	0.13	0.13	9.04
45. CONSTR. & MINING MACHINERY	0.01	0.01	0.01	0.01	0.02	0.02	8.85
46. MATERIALS HANDLING MACH. & EQ.	0.02	0.02	0.02	0.03	0.03	0.03	10.75
47. METALWORKING MACH. & EQ.	0.04	0.04	0.05	0.05	0.05	0.06	9.36
48. SPECIAL INDUSTRY MACHINERY	0.01	0.01	0.01	0.01	0.01	0.01	14.74
49. GENERAL INDUSTRY MACHINERY	0.05	0.06	0.07	0.07	0.08	0.08	7.51
50. MISC. NONELECTRICAL MACH.	0.02	0.03	0.03	0.03	0.03	0.04	7.51
52. SERVICE INDUSTRY MACHINES	0.01	0.01	0.01	0.01	0.01	0.01	13.37
53. ELECTRICAL MACHINERY	0.06	0.07	0.07	0.08	0.09	0.10	11.06

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
25. ENGINEERING&SCIENCE TECH NEC
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
55. ELECTRIC LIGHTING & WIRING EQ.	0.03	0.03	0.03	0.04	0.04	0.04	8.25
56. RADIO,TV, & COMMUNICATION EQ.	1.74	2.02	2.24	2.45	2.61	2.69	9.06
57. ELECTRONIC COMPONENTS & ACCESS.	1.13	1.36	1.54	1.73	1.90	2.00	12.09
58. MISC. ELECTRICAL MACH. & EQ.	0.03	0.03	0.03	0.04	0.04	0.04	9.58
59. MOTOR VEHICLES & EQUIPMENT	0.08	0.10	0.11	0.13	0.16	0.18	17.86
60. AIRCRAFT & PARTS	3.51	3.98	4.40	4.87	5.22	5.37	8.84
61. OTHER TRANSPORTATION EQ.	0.19	0.20	0.21	0.21	0.22	0.23	3.24
62. INSTRUMENTS & SUPPLIES	0.64	0.73	0.80	0.88	0.95	0.99	9.11
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.10	0.11	0.12	0.14	0.15	0.16	8.66
64. MISC. MANUFACTURING	0.01	0.01	0.01	0.01	0.01	0.01	6.16
65. TRANSPORTATION & WAREHOUSING	0.06	0.06	0.06	0.07	0.07	0.07	3.06
66. COMMUNICATION EXC. RADIO & TV	0.13	0.14	0.15	0.16	0.17	0.17	5.94
67. RADIO & TV BROADCASTING	0.29	0.32	0.34	0.36	0.38	0.39	6.07
68. UTILITIES	0.24	0.26	0.28	0.30	0.32	0.33	6.57
69. WHOLESALE & RETAIL TRADE	0.03	0.03	0.03	0.04	0.04	0.04	8.62
70. FINANCE & INSURANCE	0.01	0.01	0.01	0.01	0.02	0.02	11.22
71. REAL ESTATE & RENTAL	0.01	0.01	0.01	0.01	0.01	0.01	8.98
72. PERSONAL SERVICES EXC. AUTO.	0.02	0.02	0.02	0.02	0.02	0.03	8.61
73. BUSINESS SERVICES	0.65	0.72	0.78	0.85	0.91	0.93	7.67
76. AMUSEMENTS	0.03	0.03	0.03	0.04	0.04	0.04	7.44
77. MISC. SERVICES	0.63	0.65	0.68	0.72	0.76	0.78	4.58
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.94	0.96	1.00	1.05	1.08	1.09	3.01
82. GOVERNMENT INDUSTRY	17.46	17.24	17.69	18.31	18.73	18.98	1.69
TOTAL, ALL INDUSTRIES	33.58	35.36	37.50	39.97	41.88	43.02	5.08
TOTAL EMPLOYMENT							
2. OTHER AGRICULTURAL PRODUCTS	3.98	4.00	4.02	4.00	4.00	3.99	0.05
4. AGR.,FORESTRY,&FISHERY SERV.	1.94	2.00	2.02	2.06	2.09	2.12	1.76
5. IRON ORE MINING	0.30	0.32	0.34	0.34	0.33	0.32	1.67
6. NONFERROUS METAL MINING	1.22	1.28	1.32	1.35	1.34	1.34	1.94
7. COAL MINING	1.47	1.55	1.62	1.67	1.73	1.78	3.94
8. CRUDE PETROLEUM & N. GAS	4.98	5.03	5.07	5.02	5.00	5.08	0.40
9. STONE&CLAY MINING & QUARRYING	0.53	0.55	0.57	0.59	0.61	0.61	2.75
10. CHEM&FERTILIZER MIN. MINING	0.39	0.40	0.41	0.42	0.43	0.43	1.99
11. NEW CONSTRUCTION	5.55	5.67	5.78	5.97	6.12	6.21	2.28
13. ORDNANCE & ACCESSORIES	3.81	3.92	4.01	4.13	4.21	4.27	2.30
14. FOOD & KINDRED PRODUCTS	9.19	9.41	9.56	9.63	9.63	9.66	1.00
16. FABRIC,YARN & THREAD MILLS	2.33	2.42	2.50	2.56	2.60	2.62	2.37

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
25. ENGINEERING&SCIENCE TECH NEC
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
17. MISC. TEXTILE GOODS	1.13	1.17	1.22	1.26	1.28	1.29	2.73
20. LUMBER & WOOD PRODUCTS	2.59	2.77	2.85	2.92	2.91	2.85	1.92
24. PAPER & ALLIED PRODUCTS	2.45	2.52	2.54	2.54	2.54	2.53	0.67
27. CHEMICALS & PRODUCTS	14.73	15.11	15.44	15.69	15.88	16.06	1.75
28. PLASTICS & SYNTHETIC MATLS.	5.52	5.78	6.06	6.27	6.42	6.51	3.34
29. DRUGS,CLEANING & TOILET PREP.	13.34	13.58	13.94	14.25	14.40	14.58	1.79
30. PAINTS & ALLIED PRODUCTS	1.12	1.18	1.24	1.30	1.34	1.38	4.30
31. PET REFINING & REL. PROD.	3.83	3.86	3.92	3.99	4.03	4.06	1.17
32. RUBBER & MISC. PLASTICS PROD.	6.57	6.81	7.13	7.38	7.60	7.70	3.23
35. GLASS & GLASS PRODUCTS	0.61	0.62	0.62	0.63	0.62	0.61	0.08
36. STONE & CLAY PRODUCTS	2.36	2.39	2.42	2.46	2.46	2.41	0.46
37. PRIMARY FERROUS METALS	3.00	3.12	3.25	3.32	3.35	3.36	2.28
38. NONFERROUS METALS	2.71	2.85	3.00	3.14	3.23	3.32	4.15
40. FAB. STRUCTURAL METAL PRODUCTS	1.34	1.36	1.41	1.47	1.52	1.55	3.03
41. SCREW MACHINE PROD.&STAMPINGS	0.70	0.74	0.76	0.78	0.78	0.78	2.18
42. OTHER FAB. METAL PRODUCTS	1.04	1.09	1.16	1.22	1.26	1.31	4.78
43. ENGINES & TURBINES	1.03	1.08	1.13	1.16	1.18	1.20	3.03
45. CONSTR. & MINING MACHINERY	0.93	1.00	1.07	1.12	1.17	1.20	5.20
46. MATERIALS HANDLING MACH. & EQ.	0.33	0.35	0.38	0.40	0.41	0.43	5.17
47. METALWORKING MACH. & EQ.	0.71	0.74	0.78	0.81	0.84	0.85	3.76
48. SPECIAL INDUSTRY MACHINERY	0.83	0.87	0.93	1.00	1.04	1.09	5.68
49. GENERAL INDUSTRY MACHINERY	1.24	1.27	1.33	1.37	1.39	1.41	2.62
50. MISC. NONELECTRICAL MACH.	0.22	0.22	0.23	0.24	0.24	0.24	2.21
52. SERVICE INDUSTRY MACHINES	0.38	0.39	0.41	0.42	0.42	0.42	2.10
53. ELECTRICAL MACHINERY	1.13	1.18	1.25	1.31	1.34	1.37	3.88
55. ELECTRIC LIGHTING & WIRING EQ.	0.59	0.60	0.61	0.63	0.64	0.65	1.70
56. RADIO,TV, & COMMUNICATION EQ.	4.12	4.26	4.43	4.55	4.63	4.75	2.85
57. ELECTRONIC COMPONENTS & ACCESS.	5.16	5.42	5.73	6.00	6.21	6.38	4.32
58. MISC. ELECTRICAL MACH. & EQ.	0.97	1.00	1.04	1.05	1.06	1.07	2.13
59. MOTOR VEHICLES & EQUIPMENT	4.15	4.36	4.54	4.64	4.72	4.77	2.85
60. AIRCRAFT & PARTS	7.04	7.34	7.56	7.81	7.85	7.86	2.23
61. OTHER TRANSPORTATION EQ.	0.67	0.69	0.71	0.72	0.72	0.73	1.83
62. INSTRUMENTS & SUPPLIES	5.50	5.65	5.92	6.20	6.41	6.57	3.61
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	2.37	2.40	2.51	2.62	2.71	2.78	3.29
64. MISC. MANUFACTURING	0.87	0.89	0.92	0.94	0.96	0.97	2.12
65. TRANSPORTATION & WAREHOUSING	1.37	1.39	1.40	1.41	1.40	1.38	0.17
66. COMMUNICATION EXC. RADIO & TV	5.23	5.31	5.48	5.58	5.75	5.84	2.21
67. RADIO & TV BROADCASTING	14.47	14.60	14.70	14.61	14.45	14.30	-0.23
68. UTILITIES	11.05	11.13	11.20	11.26	11.33	11.38	0.59

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
25. ENGINEERING&SCIENCE TECH NEC
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
69. WHOLESALE & RETAIL TRADE	4.50	4.60	4.69	4.77	4.82	4.88	1.64
70. FINANCE & INSURANCE	1.18	1.22	1.27	1.33	1.38	1.44	4.02
71. REAL ESTATE & RENTAL	0.23	0.24	0.24	0.25	0.26	0.26	2.56
72. PERSONAL SERVICES EXC. AUTO.	0.94	0.95	0.97	1.00	1.02	1.04	2.06
73. BUSINESS SERVICES	13.31	13.60	13.93	14.35	14.69	14.93	2.32
76. AMUSEMENTS	2.94	2.96	3.01	3.05	3.10	3.14	1.31
77. MISC. SERVICES	96.99	98.80	100.88	103.68	106.85	110.34	2.61
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	8.44	8.57	8.74	8.93	9.09	9.25	1.86
82. GOVERNMENT INDUSTRY	161.85	161.79	163.53	166.36	169.22	172.27	1.26
TOTAL, ALL INDUSTRIES	464.72	471.69	481.16	491.44	500.55	509.50	1.86

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE
BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
26. HEALTH WORKERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
4. AGR.,FORESTRY,&FISHERY SERV.	0.08	0.09	0.10	0.10	0.11	0.12	6.86
6. NONFERROUS METAL MINING	0.01	0.01	0.01	0.01	0.01	0.01	11.02
13. ORDNANCE & ACCESSORIES	0.24	0.27	0.30	0.32	0.34	0.35	7.81
14. FOOD & KINDRED PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	5.68
24. PAPER & ALLIED PRODUCTS	0.01	0.01	0.02	0.02	0.02	0.02	6.40
27. CHEMICALS & PRODUCTS	0.06	0.07	0.07	0.08	0.09	0.09	7.73
28. PLASTICS & SYNTHETIC MATLS.	0.01	0.01	0.01	0.02	0.02	0.02	8.70
29. DRUGS,CLEANING & TOILET PREP.	0.02	0.02	0.02	0.02	0.02	0.02	4.33
30. PAINTS & ALLIED PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	8.25
31. PET REFINING & REL. PROD.	0.01	0.01	0.01	0.01	0.01	0.02	5.24
32. RUBBER & MISC. PLASTICS PROD.	0.01	0.01	0.02	0.02	0.02	0.02	10.10
35. GLASS & GLASS PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	8.03
36. STONE & CLAY PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	8.18
37. PRIMARY FERROUS METALS	0.07	0.08	0.08	0.09	0.09	0.10	7.59
38. NONFERROUS METALS	0.03	0.04	0.04	0.05	0.05	0.06	9.85
40. FAB. STRUCTURAL METAL PRODUCTS	0.03	0.03	0.03	0.04	0.04	0.04	7.47
41. SCREW MACHINE PROD.&STAMPINGS	0.02	0.02	0.02	0.02	0.03	0.03	7.71
42. OTHER FAB. METAL PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	10.11
43. ENGINES & TURBINES	0.01	0.02	0.02	0.02	0.02	0.02	7.71
45. CONSTR. & MINING MACHINERY	0.01	0.01	0.01	0.01	0.01	0.01	7.24
46. MATERIALS HANDLING MACH. & EQ.	0.01	0.01	0.01	0.02	0.02	0.02	9.11
47. METALWORKING MACH. & EQ.	0.01	0.01	0.01	0.01	0.02	0.02	9.38
49. GENERAL INDUSTRY MACHINERY	0.01	0.01	0.01	0.01	0.01	0.01	7.52
51. OFFICE,COMPUTING & ACCT. MACH.	0.01	0.01	0.01	0.01	0.01	0.01	7.32
53. ELECTRICAL MACHINERY	0.01	0.01	0.01	0.02	0.02	0.02	9.05
55. ELECTRIC LIGHTING & WIRING EQ.	0.01	0.01	0.01	0.01	0.01	0.01	8.28
56. RADIO,TV, & COMMUNICATION EQ.	0.43	0.49	0.54	0.59	0.62	0.64	8.19
57. ELECTRONIC COMPONENTS & ACCESS.	0.06	0.08	0.09	0.10	0.10	0.11	11.37
58. MISC. ELECTRICAL MACH. & EQ.	0.01	0.01	0.01	0.01	0.01	0.01	9.57
59. MOTOR VEHICLES & EQUIPMENT	0.01	0.02	0.02	0.02	0.03	0.03	17.15
60. AIRCRAFT & PARTS	0.42	0.48	0.53	0.58	0.62	0.64	8.57
61. OTHER TRANSPORTATION EQ.	0.20	0.22	0.22	0.23	0.23	0.24	3.43
62. INSTRUMENTS & SUPPLIES	0.32	0.36	0.40	0.44	0.47	0.49	8.84
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.02	0.02	0.02	0.02	0.02	0.02	8.67
65. TRANSPORTATION & WAREHOUSING	0.14	0.15	0.16	0.17	0.18	0.19	6.21
66. COMMUNICATION EXC. RADIO & TV	0.01	0.01	0.01	0.01	0.01	0.01	5.46
68. UTILITIES	0.01	0.01	0.01	0.01	0.01	0.02	6.44

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
26. HEALTH WORKERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
69. WHOLESALE & RETAIL TRADE	0.62	0.69	0.76	0.83	0.88	0.92	8.01
70. FINANCE & INSURANCE	0.06	0.07	0.08	0.09	0.10	0.10	9.67
71. REAL ESTATE & RENTAL	0.01	0.01	0.02	0.02	0.02	0.02	5.46
72. PERSONAL SERVICES EXC. AUTO.	0.09	0.09	0.10	0.11	0.12	0.12	7.23
73. BUSINESS SERVICES	1.29	1.50	1.69	1.91	2.10	2.24	11.58
74. EATING & DRINKING PLACES	0.01	0.01	0.01	0.01	0.02	0.02	5.75
77. MISC. SERVICES	18.52	19.21	20.18	21.59	22.81	23.56	4.93
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	9.44	9.76	10.22	10.79	11.17	11.42	3.89
82. GOVERNMENT INDUSTRY	11.93	11.76	12.05	12.44	12.71	12.86	1.50
TOTAL, ALL INDUSTRIES	44.37	45.81	48.04	50.98	53.30	54.74	4.29
TOTAL EMPLOYMENT							
4. AGR.,FORESTRY,&FISHERY SERV.	4.55	4.67	4.72	4.83	4.88	4.96	1.76
6. NONFERROUS METAL MINING	0.11	0.12	0.13	0.13	0.13	0.13	2.44
13. ORDNANCE & ACCESSORIES	0.40	0.41	0.41	0.42	0.43	0.43	1.71
14. FOOD & KINDRED PRODUCTS	1.16	1.18	1.19	1.19	1.19	1.19	0.54
24. PAPER & ALLIED PRODUCTS	0.68	0.70	0.71	0.71	0.71	0.70	0.58
27. CHEMICALS & PRODUCTS	1.31	1.34	1.36	1.38	1.39	1.39	1.21
28. PLASTICS & SYNTHETIC MATLS.	0.50	0.52	0.53	0.55	0.55	0.56	2.31
29. DRUGS,CLEANING & TOILET PREP.	5.13	5.17	5.26	5.33	5.34	5.37	0.92
30. PAINTS & ALLIED PRODUCTS	0.13	0.13	0.14	0.14	0.14	0.15	3.02
31. PET REFINING & REL. PROD.	0.22	0.22	0.22	0.22	0.22	0.22	0.30
32. RUBBER & MISC. PLASTICS PROD.	0.44	0.46	0.48	0.49	0.50	0.51	2.68
35. GLASS & GLASS PRODUCTS	0.26	0.26	0.26	0.26	0.25	0.25	-0.57
36. STONE & CLAY PRODUCTS	0.20	0.20	0.20	0.21	0.21	0.21	0.96
37. PRIMARY FERROUS METALS	0.96	0.99	1.02	1.03	1.03	1.02	1.24
38. NONFERROUS METALS	0.41	0.43	0.44	0.46	0.47	0.48	3.23
40. FAB. STRUCTURAL METAL PRODUCTS	0.63	0.63	0.64	0.66	0.68	0.69	1.74
41. SCREW MACHINE PROD.&STAMPINGS	0.31	0.32	0.33	0.34	0.34	0.34	2.18
42. OTHER FAB. METAL PRODUCTS	0.18	0.19	0.20	0.20	0.21	0.22	3.39
43. ENGINES & TURBINES	0.16	0.17	0.17	0.18	0.18	0.18	1.77
45. CONSTR. & MINING MACHINERY	0.55	0.58	0.61	0.63	0.65	0.65	3.63
46. MATERIALS HANDLING MACH. & EQ.	0.20	0.20	0.21	0.22	0.23	0.23	3.61
47. METALWORKING MACH. & EQ.	0.20	0.21	0.22	0.23	0.24	0.24	3.78
49. GENERAL INDUSTRY MACHINERY	0.22	0.23	0.24	0.25	0.25	0.26	2.62
51. OFFICE,COMPUTING & ACCT. MACH.	0.26	0.27	0.28	0.28	0.29	0.29	2.72
53. ELECTRICAL MACHINERY	0.22	0.23	0.24	0.24	0.24	0.25	2.00
55. ELECTRIC LIGHTING & WIRING EQ.	0.17	0.18	0.18	0.19	0.19	0.19	1.73

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
26. HEALTH WORKERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
56. RADIO,TV, & COMMUNICATION EQ.	1.01	1.04	1.07	1.09	1.10	1.12	2.03
57. ELECTRONIC COMPONENTS & ACCESS.	0.29	0.30	0.32	0.33	0.34	0.35	3.65
58. MISC. ELECTRICAL MACH. & EQ.	0.24	0.25	0.26	0.26	0.27	0.27	2.12
59. MOTOR VEHICLES & EQUIPMENT	0.77	0.81	0.83	0.85	0.86	0.86	2.24
60. AIRCRAFT & PARTS	0.84	0.88	0.90	0.93	0.93	0.93	1.98
61. OTHER TRANSPORTATION EQ.	0.70	0.72	0.75	0.77	0.77	0.78	2.02
62. INSTRUMENTS & SUPPLIES	2.74	2.80	2.93	3.06	3.16	3.22	3.35
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.36	0.37	0.38	0.40	0.42	0.43	3.30
65. TRANSPORTATION & WAREHOUSING	3.23	3.37	3.50	3.64	3.73	3.79	3.24
66. COMMUNICATION EXC. RADIO & TV	0.35	0.35	0.36	0.37	0.38	0.38	1.75
68. UTILITIES	0.52	0.52	0.52	0.53	0.53	0.53	0.47
69. WHOLESALE & RETAIL TRADE	101.89	103.55	105.18	106.31	106.85	107.48	1.07
70. FINANCE & INSURANCE	7.39	7.54	7.71	7.93	8.17	8.39	2.57
71. REAL ESTATE & RENTAL	0.49	0.49	0.49	0.49	0.48	0.48	-0.74
72. PERSONAL SERVICES EXC. AUTO.	4.64	4.66	4.71	4.75	4.79	4.82	0.76
73. BUSINESS SERVICES	26.64	28.36	30.20	32.22	34.08	35.73	6.04
74. EATING & DRINKING PLACES	0.65	0.67	0.68	0.68	0.69	0.69	1.05
77. MISC. SERVICES	2,868.52	2,933.61	3,006.11	3,099.89	3,204.66	3,319.22	2.96
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	446.84	456.03	466.63	480.28	495.26	511.52	2.74
82. GOVERNMENT INDUSTRY	253.83	252.86	254.76	258.47	262.20	265.96	0.94
TOTAL, ALL INDUSTRIES	3,776.29	3,853.99	3,943.58	4,058.93	4,185.51	4,322.96	2.74

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
27. DENTISTS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
77. MISC. SERVICES	0.44	0.46	0.49	0.52	0.56	0.58	5.55
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	1.55	1.65	1.76	1.88	1.97	2.03	5.60
82. GOVERNMENT INDUSTRY	0.01	0.01	0.01	0.01	0.01	0.01	0.85
TOTAL, ALL INDUSTRIES	2.01	2.13	2.26	2.43	2.54	2.63	5.57
TOTAL EMPLOYMENT							
77. MISC. SERVICES	68.17	70.16	72.34	75.04	78.01	81.23	3.57
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	124.23	127.72	131.58	136.38	141.66	147.37	3.47
82. GOVERNMENT INDUSTRY	2.33	2.32	2.33	2.36	2.39	2.41	0.67
TOTAL, ALL INDUSTRIES	194.81	200.28	206.34	213.86	222.13	231.09	3.47

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
28. PROFESSIONAL NURSES
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	0.13	0.14	0.15	0.16	0.17	0.18	7.31
24. PAPER & ALLIED PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	6.36
27. CHEMICALS & PRODUCTS	0.02	0.03	0.03	0.03	0.03	0.04	7.84
28. PLASTICS & SYNTHETIC MATLS.	0.01	0.01	0.01	0.01	0.01	0.01	8.71
31. PET REFINING & REL. PROD.	0.01	0.01	0.01	0.01	0.01	0.01	5.27
32. RUBBER & MISC. PLASTICS PROD.	0.01	0.01	0.01	0.01	0.01	0.01	9.88
37. PRIMARY FERROUS METALS	0.05	0.05	0.06	0.06	0.07	0.07	7.67
38. NONFERROUS METALS	0.03	0.04	0.04	0.04	0.05	0.05	9.90
40. FAB. STRUCTURAL METAL PRODUCTS	0.01	0.01	0.02	0.02	0.02	0.02	7.86
41. SCREW MACHINE PROD.&STAMPINGS	0.01	0.02	0.02	0.02	0.02	0.02	7.72
42. OTHER FAB. METAL PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	10.14
43. ENGINES & TURBINES	0.01	0.01	0.01	0.01	0.01	0.01	7.73
46. MATERIALS HANDLING MACH. & EQ.	0.01	0.01	0.01	0.01	0.01	0.01	9.11
47. METALWORKING MACH. & EQ.	0.01	0.01	0.01	0.01	0.02	0.02	9.39
49. GENERAL INDUSTRY MACHINERY	0.01	0.01	0.01	0.01	0.01	0.01	7.52
51. OFFICE,COMPUTING & ACCT. MACH.	0.01	0.01	0.01	0.01	0.01	0.01	7.28
53. ELECTRICAL MACHINERY	0.01	0.01	0.01	0.01	0.01	0.01	9.05
55. ELECTRIC LIGHTING & WIRING EQ.	0.01	0.01	0.01	0.01	0.01	0.01	8.28
56. RADIO,TV, & COMMUNICATION EQ.	0.19	0.22	0.24	0.26	0.28	0.28	8.12
57. ELECTRONIC COMPONENTS & ACCESS.	0.05	0.07	0.07	0.08	0.09	0.09	11.37
58. MISC. ELECTRICAL MACH. & EQ.	0.01	0.01	0.01	0.01	0.01	0.01	9.58
59. MOTOR VEHICLES & EQUIPMENT	0.01	0.02	0.02	0.02	0.03	0.03	17.14
60. AIRCRAFT & PARTS	0.25	0.28	0.31	0.34	0.36	0.37	8.58
61. OTHER TRANSPORTATION EQ.	0.07	0.07	0.07	0.08	0.08	0.08	3.28
62. INSTRUMENTS & SUPPLIES	0.03	0.03	0.03	0.04	0.04	0.04	8.35
65. TRANSPORTATION & WAREHOUSING	0.03	0.03	0.03	0.03	0.03	0.03	4.25
66. COMMUNICATION EXC. RADIO & TV	0.01	0.01	0.01	0.01	0.01	0.01	5.48
70. FINANCE & INSURANCE	0.03	0.04	0.04	0.05	0.05	0.05	9.43
71. REAL ESTATE & RENTAL	0.01	0.01	0.02	0.02	0.02	0.02	5.31
72. PERSONAL SERVICES EXC. AUTO.	0.03	0.03	0.04	0.04	0.04	0.04	5.77
77. MISC. SERVICES	7.00	7.35	7.81	8.44	9.01	9.39	6.06
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.86	0.90	0.94	1.00	1.03	1.06	4.20
82. GOVERNMENT INDUSTRY	3.65	3.59	3.67	3.78	3.85	3.89	1.30
TOTAL, ALL INDUSTRIES	12.65	13.11	13.81	14.73	15.51	16.01	4.83

TOTAL EMPLOYMENT

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
28. PROFESSIONAL NURSES
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
13. ORDNANCE & ACCESSORIES	0.21	0.21	0.21	0.22	0.22	0.22	1.24
24. PAPER & ALLIED PRODUCTS	0.57	0.59	0.59	0.59	0.59	0.59	0.55
27. CHEMICALS & PRODUCTS	0.52	0.53	0.54	0.54	0.55	0.55	1.31
28. PLASTICS & SYNTHETIC MATLS.	0.27	0.28	0.29	0.30	0.31	0.31	2.32
31. PET REFINING & REL. PROD.	0.14	0.14	0.14	0.15	0.15	0.15	0.33
32. RUBBER & MISC. PLASTICS PROD.	0.34	0.35	0.36	0.37	0.38	0.38	2.49
37. PRIMARY FERROUS METALS	0.69	0.71	0.73	0.74	0.74	0.74	1.31
38. NONFERROUS METALS	0.36	0.38	0.39	0.41	0.42	0.42	3.27
40. FAB. STRUCTURAL METAL PRODUCTS	0.29	0.30	0.30	0.31	0.32	0.33	2.11
41. SCREW MACHINE PROD.&STAMPINGS	0.22	0.23	0.24	0.25	0.25	0.25	2.19
42. OTHER FAB. METAL PRODUCTS	0.15	0.16	0.17	0.17	0.18	0.18	3.41
43. ENGINES & TURBINES	0.11	0.11	0.11	0.11	0.12	0.12	1.79
46. MATERIALS HANDLING MACH. & EQ.	0.13	0.13	0.14	0.14	0.15	0.15	3.61
47. METALWORKING MACH. & EQ.	0.20	0.21	0.22	0.23	0.24	0.24	3.79
49. GENERAL INDUSTRY MACHINERY	0.20	0.21	0.22	0.22	0.23	0.23	2.63
51. OFFICE,COMPUTING & ACCT. MACH.	0.19	0.20	0.21	0.21	0.21	0.22	2.69
53. ELECTRICAL MACHINERY	0.19	0.20	0.20	0.21	0.21	0.21	2.00
55. ELECTRIC LIGHTING & WIRING EQ.	0.17	0.17	0.17	0.17	0.18	0.18	1.73
56. RADIO,TV, & COMMUNICATION EQ.	0.45	0.46	0.48	0.48	0.49	0.50	1.97
57. ELECTRONIC COMPONENTS & ACCESS.	0.25	0.26	0.27	0.28	0.29	0.30	3.65
58. MISC. ELECTRICAL MACH. & EQ.	0.21	0.22	0.23	0.23	0.24	0.24	2.13
59. MOTOR VEHICLES & EQUIPMENT	0.74	0.77	0.80	0.81	0.82	0.83	2.22
60. AIRCRAFT & PARTS	0.49	0.51	0.53	0.54	0.54	0.54	1.98
61. OTHER TRANSPORTATION EQ.	0.24	0.24	0.25	0.26	0.26	0.26	1.87
62. INSTRUMENTS & SUPPLIES	0.24	0.25	0.26	0.27	0.27	0.28	2.88
65. TRANSPORTATION & WAREHOUSING	0.61	0.62	0.63	0.65	0.65	0.65	1.33
66. COMMUNICATION EXC. RADIO & TV	0.26	0.27	0.27	0.28	0.28	0.29	1.76
70. FINANCE & INSURANCE	3.91	3.97	4.06	4.16	4.28	4.39	2.34
71. REAL ESTATE & RENTAL	0.47	0.47	0.47	0.46	0.46	0.45	-0.89
72. PERSONAL SERVICES EXC. AUTO.	1.69	1.67	1.66	1.65	1.65	1.64	-0.60
77. MISC. SERVICES	1,083.95	1,121.85	1,162.63	1,211.67	1,265.21	1,322.84	4.06
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	41.52	42.82	44.25	45.99	47.88	49.90	3.74
82. GOVERNMENT INDUSTRY	98.55	98.24	99.05	100.56	102.07	103.60	1.00
TOTAL, ALL INDUSTRIES	1,257.85	1,297.08	1,340.51	1,393.13	1,450.28	1,511.60	3.74

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE
BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
29. PHYSICIANS, MEDICAL&OSTEOPATHIC
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	0.04	0.05	0.05	0.05	0.06	0.06	8.09
56. RADIO,TV, & COMMUNICATION EQ.	0.04	0.05	0.05	0.05	0.06	0.06	8.16
60. AIRCRAFT & PARTS	0.04	0.04	0.05	0.05	0.06	0.06	8.53
61. OTHER TRANSPORTATION EQ.	0.01	0.01	0.01	0.01	0.01	0.01	3.48
70. FINANCE & INSURANCE	0.01	0.01	0.01	0.01	0.01	0.01	10.24
73. BUSINESS SERVICES	0.02	0.02	0.02	0.03	0.03	0.03	11.93
77. MISC. SERVICES	2.22	2.31	2.44	2.61	2.77	2.87	5.27
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	3.40	3.49	3.64	3.83	3.95	4.03	3.44
82. GOVERNMENT INDUSTRY	0.85	0.83	0.85	0.87	0.89	0.89	1.02
TOTAL, ALL INDUSTRIES	6.66	6.85	7.16	7.57	7.88	8.07	3.93
TOTAL EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	0.07	0.07	0.07	0.07	0.07	0.07	1.98
56. RADIO,TV, & COMMUNICATION EQ.	0.09	0.10	0.10	0.10	0.10	0.10	2.01
60. AIRCRAFT & PARTS	0.08	0.08	0.08	0.09	0.09	0.09	1.94
61. OTHER TRANSPORTATION EQ.	0.03	0.04	0.04	0.04	0.04	0.04	2.06
70. FINANCE & INSURANCE	1.01	1.04	1.07	1.11	1.14	1.18	3.10
73. BUSINESS SERVICES	0.38	0.40	0.43	0.46	0.49	0.51	6.38
77. MISC. SERVICES	343.91	352.91	362.85	375.36	389.25	404.34	3.29
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	157.88	161.48	165.64	170.96	176.84	183.24	3.02
82. GOVERNMENT INDUSTRY	38.13	37.83	37.94	38.31	38.68	39.11	0.51
TOTAL, ALL INDUSTRIES	542.82	555.19	569.50	587.79	608.00	630.01	3.02

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE
BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
30. ALL OTHER HEALTH PROFESSIONALS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
4. AGR.,FORESTRY,&FISHERY SERV.	0.08	0.09	0.09	0.10	0.11	0.11	6.90
29. DRUGS,CLEANING & TOILET PREP.	0.01	0.01	0.01	0.01	0.01	0.01	4.34
69. WHOLESALE & RETAIL TRADE	0.58	0.65	0.71	0.77	0.83	0.86	8.08
77. MISC. SERVICES	0.34	0.36	0.38	0.40	0.43	0.44	5.41
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	2.78	3.25	3.79	4.39	4.94	5.42	14.29
82. GOVERNMENT INDUSTRY	0.87	1.03	1.23	1.44	1.65	1.83	16.02
TOTAL, ALL INDUSTRIES	4.69	5.42	6.25	7.17	8.02	8.75	13.30
TOTAL EMPLOYMENT							
4. AGR.,FORESTRY,&FISHERY SERV.	4.45	4.58	4.63	4.73	4.79	4.87	1.80
29. DRUGS,CLEANING & TOILET PREP.	3.42	3.45	3.51	3.56	3.57	3.58	0.93
69. WHOLESALE & RETAIL TRADE	95.24	96.86	98.44	99.55	100.12	100.77	1.13
77. MISC. SERVICES	52.35	54.34	56.00	57.93	59.88	61.96	3.43
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	106.33	111.47	116.54	121.71	126.58	131.50	4.34
82. GOVERNMENT INDUSTRY	21.38	25.85	30.61	35.73	40.95	46.02	16.58
TOTAL, ALL INDUSTRIES	285.38	299.17	312.76	326.66	339.73	352.91	4.34

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
31. OTHER HEALTH WORKERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	0.07	0.08	0.09	0.10	0.11	0.11	8.46
27. CHEMICALS & PRODUCTS	0.04	0.04	0.04	0.05	0.05	0.05	7.70
30. PAINTS & ALLIED PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	8.24
37. PRIMARY FERROUS METALS	0.02	0.02	0.02	0.02	0.02	0.02	7.38
40. FAB. STRUCTURAL METAL PRODUCTS	0.01	0.02	0.02	0.02	0.02	0.02	7.11
56. RADIO,TV, & COMMUNICATION EQ.	0.20	0.23	0.25	0.27	0.29	0.29	8.19
57. ELECTRONIC COMPONENTS & ACCESS.	0.01	0.01	0.01	0.01	0.01	0.01	11.43
60. AIRCRAFT & PARTS	0.14	0.15	0.17	0.19	0.20	0.21	8.58
61. OTHER TRANSPORTATION EQ.	0.13	0.13	0.14	0.14	0.14	0.15	3.51
62. INSTRUMENTS & SUPPLIES	0.28	0.32	0.35	0.39	0.42	0.43	8.87
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.01	0.01	0.01	0.01	0.01	0.01	8.68
65. TRANSPORTATION & WAREHOUSING	0.11	0.12	0.12	0.13	0.14	0.15	6.74
68. UTILITIES	0.01	0.01	0.01	0.01	0.01	0.01	6.91
69. WHOLESALE & RETAIL TRADE	0.04	0.04	0.04	0.05	0.05	0.05	6.86
70. FINANCE & INSURANCE	0.02	0.02	0.03	0.03	0.03	0.03	9.21
72. PERSONAL SERVICES EXC. AUTO.	0.05	0.05	0.05	0.05	0.04	0.04	-2.49
73. BUSINESS SERVICES	1.27	1.47	1.66	1.88	2.07	2.20	11.56
74. EATING & DRINKING PLACES	0.01	0.01	0.01	0.01	0.01	0.01	-3.25
77. MISC. SERVICES	8.52	8.74	9.08	9.61	10.05	10.28	3.83
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.58	0.59	0.61	0.64	0.65	0.66	2.49
82. GOVERNMENT INDUSTRY	6.55	6.29	6.29	6.33	6.31	6.23	-1.01
TOTAL, ALL INDUSTRIES	18.12	18.42	19.08	20.02	20.73	21.06	3.06
TOTAL EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	0.12	0.13	0.13	0.13	0.14	0.14	2.33
27. CHEMICALS & PRODUCTS	0.73	0.75	0.76	0.77	0.77	0.78	1.18
30. PAINTS & ALLIED PRODUCTS	0.11	0.11	0.12	0.12	0.13	0.13	3.02
37. PRIMARY FERROUS METALS	0.24	0.24	0.25	0.25	0.25	0.25	1.03
40. FAB. STRUCTURAL METAL PRODUCTS	0.33	0.33	0.33	0.34	0.35	0.35	1.40
56. RADIO,TV, & COMMUNICATION EQ.	0.47	0.48	0.50	0.51	0.51	0.52	2.03
57. ELECTRONIC COMPONENTS & ACCESS.	0.03	0.03	0.03	0.04	0.04	0.04	3.71
60. AIRCRAFT & PARTS	0.27	0.28	0.29	0.30	0.30	0.30	1.98
61. OTHER TRANSPORTATION EQ.	0.43	0.45	0.46	0.47	0.48	0.48	2.10
62. INSTRUMENTS & SUPPLIES	2.43	2.49	2.60	2.72	2.80	2.87	3.38
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.20	0.21	0.21	0.22	0.23	0.24	3.31
65. TRANSPORTATION & WAREHOUSING	2.52	2.63	2.75	2.88	2.96	3.03	3.75

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
31. OTHER HEALTH WORKERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
68. UTILITIES	0.26	0.26	0.27	0.27	0.27	0.27	0.91
69. WHOLESALE & RETAIL TRADE	5.96	5.99	6.02	6.02	5.99	5.96	-0.01
70. FINANCE & INSURANCE	2.44	2.47	2.52	2.58	2.65	2.71	2.13
72. PERSONAL SERVICES EXC. AUTO.	2.47	2.29	2.12	1.94	1.77	1.60	-8.37
73. BUSINESS SERVICES	26.19	27.87	29.67	31.65	33.47	35.08	6.02
74. EATING & DRINKING PLACES	0.53	0.49	0.44	0.39	0.34	0.30	-10.91
77. MISC. SERVICES	1,320.14	1,334.34	1,352.29	1,379.88	1,412.31	1,448.86	1.88
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	27.31	27.56	27.90	28.43	29.05	29.73	1.72
82. GOVERNMENT INDUSTRY	97.95	95.39	93.96	93.19	92.43	91.67	-1.32
TOTAL, ALL INDUSTRIES	1,510.38	1,524.04	1,542.88	1,572.36	1,606.42	1,644.42	1.72

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
32. TECHNICIANS NEC
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
4. AGR.,FORESTRY,&FISHERY SERV.	0.02	0.02	0.02	0.03	0.03	0.03	6.86
6. NONFERROUS METAL MINING	0.01	0.02	0.02	0.02	0.02	0.02	11.49
7. COAL MINING	0.01	0.01	0.01	0.01	0.01	0.01	9.30
8. CRUDE PETROLEUM & N. GAS	0.10	0.10	0.11	0.11	0.12	0.12	4.02
11. NEW CONSTRUCTION	0.06	0.07	0.08	0.08	0.09	0.09	8.52
13. ORDNANCE & ACCESSORIES	1.06	1.19	1.30	1.40	1.47	1.52	7.64
16. FABRIC,YARN & THREAD MILLS	0.01	0.01	0.01	0.02	0.02	0.02	5.97
24. PAPER & ALLIED PRODUCTS	0.02	0.02	0.02	0.02	0.02	0.02	6.87
26. PRINTING & PUBLISHING	0.01	0.01	0.01	0.01	0.01	0.01	4.97
27. CHEMICALS & PRODUCTS	0.07	0.07	0.08	0.09	0.09	0.10	7.78
28. PLASTICS & SYNTHETIC MATLS.	0.03	0.04	0.04	0.05	0.05	0.05	8.71
30. PAINTS & ALLIED PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	8.24
31. PET REFINING & REL. PROD.	0.02	0.02	0.02	0.02	0.02	0.02	5.27
32. RUBBER & MISC. PLASTICS PROD.	0.03	0.03	0.03	0.04	0.04	0.04	10.30
35. GLASS & GLASS PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	8.39
36. STONE & CLAY PRODUCTS	0.01	0.02	0.02	0.02	0.02	0.02	8.12
37. PRIMARY FERROUS METALS	0.09	0.10	0.11	0.12	0.13	0.13	7.45
38. NONFERROUS METALS	0.11	0.13	0.14	0.15	0.16	0.17	9.55
40. FAB. STRUCTURAL METAL PRODUCTS	0.05	0.05	0.05	0.06	0.06	0.07	7.66
41. SCREW MACHINE PROD.&STAMPINGS	0.02	0.03	0.03	0.03	0.03	0.04	7.70
42. OTHER FAB. METAL PRODUCTS	0.03	0.04	0.04	0.05	0.05	0.05	9.86
43. ENGINES & TURBINES	0.03	0.04	0.04	0.04	0.05	0.05	7.69
45. CONSTR. & MINING MACHINERY	0.01	0.01	0.01	0.02	0.02	0.02	7.24
46. MATERIALS HANDLING MACH. & EQ.	0.02	0.02	0.03	0.03	0.03	0.03	9.12
47. METALWORKING MACH. & EQ.	0.07	0.08	0.09	0.10	0.10	0.11	9.37
49. GENERAL INDUSTRY MACHINERY	0.04	0.05	0.05	0.06	0.06	0.06	7.52
50. MISC. NONELECTRICAL MACH.	0.05	0.05	0.06	0.06	0.07	0.07	7.54
51. OFFICE,COMPUTING & ACCT. MACH.	0.02	0.02	0.03	0.03	0.03	0.03	7.33
52. SERVICE INDUSTRY MACHINES	0.01	0.01	0.01	0.01	0.01	0.01	13.38
53. ELECTRICAL MACHINERY	0.04	0.04	0.05	0.05	0.06	0.06	9.21
55. ELECTRIC LIGHTING & WIRING EQ.	0.01	0.01	0.01	0.01	0.01	0.01	8.27
56. RADIO,TV, & COMMUNICATION EQ.	1.59	1.84	2.02	2.20	2.32	2.37	8.27
57. ELECTRONIC COMPONENTS & ACCESS.	0.20	0.24	0.27	0.30	0.33	0.34	11.37
58. MISC. ELECTRICAL MACH. & EQ.	0.02	0.02	0.02	0.02	0.02	0.03	9.57
59. MOTOR VEHICLES & EQUIPMENT	0.02	0.02	0.03	0.03	0.04	0.05	17.14
60. AIRCRAFT & PARTS	2.17	2.46	2.71	2.99	3.19	3.28	8.59
61. OTHER TRANSPORTATION EQ.	0.23	0.25	0.25	0.26	0.27	0.28	3.40

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
32. TECHNICIANS NEC
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
62. INSTRUMENTS & SUPPLIES	0.17	0.19	0.21	0.22	0.24	0.25	7.78
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.05	0.05	0.05	0.06	0.07	0.07	8.48
65. TRANSPORTATION & WAREHOUSING	2.67	2.85	3.02	3.24	3.41	3.52	5.71
66. COMMUNICATION EXC. RADIO & TV	0.04	0.04	0.05	0.05	0.05	0.06	6.63
67. RADIO & TV BROADCASTING	0.01	0.01	0.01	0.01	0.01	0.01	8.22
68. UTILITIES	0.09	0.10	0.10	0.11	0.12	0.12	5.99
69. WHOLESALE & RETAIL TRADE	0.07	0.08	0.09	0.10	0.11	0.12	9.69
70. FINANCE & INSURANCE	0.08	0.09	0.10	0.11	0.12	0.13	9.78
71. REAL ESTATE & RENTAL	0.01	0.01	0.02	0.02	0.02	0.02	6.08
72. PERSONAL SERVICES EXC. AUTO.	0.33	0.37	0.40	0.44	0.47	0.49	8.20
73. BUSINESS SERVICES	0.02	0.03	0.03	0.03	0.04	0.04	8.69
76. AMUSEMENTS	0.02	0.02	0.02	0.02	0.02	0.02	7.57
77. MISC. SERVICES	0.30	0.30	0.31	0.32	0.34	0.34	2.88
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.51	0.52	0.54	0.56	0.57	0.58	2.46
82. GOVERNMENT INDUSTRY	12.36	12.09	12.29	12.61	12.79	12.85	0.79
TOTAL, ALL INDUSTRIES	23.08	23.96	25.12	26.52	27.51	28.03	3.97

TOTAL EMPLOYMENT

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
4. AGR.,FORESTRY,&FISHERY SERV.	1.11	1.14	1.15	1.18	1.19	1.21	1.76
6. NONFERROUS METAL MINING	0.24	0.26	0.27	0.27	0.27	0.28	2.88
7. COAL MINING	0.22	0.24	0.25	0.25	0.26	0.27	3.59
8. CRUDE PETROLEUM & N. GAS	1.33	1.33	1.32	1.30	1.28	1.28	-0.75
11. NEW CONSTRUCTION	1.68	1.71	1.74	1.80	1.84	1.86	2.10
13. ORDNANCE & ACCESSORIES	1.75	1.78	1.81	1.85	1.87	1.89	1.55
16. FABRIC,YARN & THREAD MILLS	1.00	1.03	1.07	1.10	1.12	1.13	2.55
24. PAPER & ALLIED PRODUCTS	0.95	0.98	1.00	1.00	1.00	1.00	1.02
26. PRINTING & PUBLISHING	0.73	0.73	0.73	0.72	0.72	0.71	-0.59
27. CHEMICALS & PRODUCTS	1.41	1.44	1.46	1.48	1.49	1.50	1.26
28. PLASTICS & SYNTHETIC MATLS.	1.45	1.50	1.56	1.59	1.62	1.62	2.31
30. PAINTS & ALLIED PRODUCTS	0.11	0.11	0.12	0.12	0.13	0.13	3.02
31. PET REFINING & REL. PROD.	0.33	0.33	0.33	0.33	0.34	0.34	0.33
32. RUBBER & MISC. PLASTICS PROD.	0.99	1.02	1.07	1.10	1.13	1.14	2.87
35. GLASS & GLASS PRODUCTS	0.41	0.41	0.41	0.41	0.41	0.40	-0.24
36. STONE & CLAY PRODUCTS	0.44	0.45	0.46	0.47	0.47	0.47	0.90
37. PRIMARY FERROUS METALS	1.30	1.33	1.37	1.38	1.38	1.37	1.10
38. NONFERROUS METALS	1.29	1.34	1.40	1.44	1.47	1.49	2.94
40. FAB. STRUCTURAL METAL PRODUCTS	1.02	1.03	1.05	1.09	1.11	1.12	1.92
41. SCREW MACHINE PROD.&STAMPINGS	0.40	0.42	0.43	0.44	0.44	0.44	2.17

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
32. TECHNICIANS NEC
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
42. OTHER FAB. METAL PRODUCTS	0.71	0.73	0.77	0.79	0.81	0.83	3.15
43. ENGINES & TURBINES	0.40	0.41	0.43	0.43	0.43	0.43	1.75
45. CONSTR. & MINING MACHINERY	1.05	1.11	1.16	1.20	1.24	1.25	3.64
46. MATERIALS HANDLING MACH. & EQ.	0.37	0.39	0.41	0.43	0.44	0.45	3.62
47. METALWORKING MACH. & EQ.	1.34	1.40	1.48	1.54	1.58	1.61	3.77
49. GENERAL INDUSTRY MACHINERY	0.99	1.01	1.06	1.09	1.10	1.12	2.63
50. MISC. NONELECTRICAL MACH.	0.41	0.42	0.44	0.45	0.45	0.46	2.24
51. OFFICE,COMPUTING & ACCT. MACH.	0.55	0.57	0.60	0.61	0.62	0.63	2.73
52. SERVICE INDUSTRY MACHINES	0.39	0.40	0.42	0.43	0.43	0.43	2.11
53. ELECTRICAL MACHINERY	0.76	0.78	0.81	0.83	0.84	0.85	2.15
55. ELECTRIC LIGHTING & WIRING EQ.	0.17	0.17	0.17	0.18	0.18	0.18	1.72
56. RADIO,TV, & COMMUNICATION EQ.	3.77	3.87	4.00	4.07	4.11	4.19	2.11
57. ELECTRONIC COMPONENTS & ACCESS.	0.91	0.95	1.00	1.04	1.07	1.09	3.65
58. MISC. ELECTRICAL MACH. & EQ.	0.60	0.62	0.65	0.65	0.66	0.67	2.12
59. MOTOR VEHICLES & EQUIPMENT	1.07	1.11	1.15	1.17	1.18	1.19	2.23
60. AIRCRAFT & PARTS	4.35	4.52	4.65	4.79	4.80	4.80	2.00
61. OTHER TRANSPORTATION EQ.	0.81	0.83	0.86	0.88	0.88	0.89	1.98
62. INSTRUMENTS & SUPPLIES	1.45	1.47	1.52	1.57	1.61	1.63	2.34
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	1.06	1.07	1.12	1.17	1.21	1.24	3.12
65. TRANSPORTATION & WAREHOUSING	62.70	64.96	67.14	69.65	70.95	71.81	2.75
66. COMMUNICATION EXC. RADIO & TV	1.63	1.67	1.73	1.78	1.84	1.88	2.88
67. RADIO & TV BROADCASTING	0.31	0.32	0.33	0.34	0.34	0.34	1.78
68. UTILITIES	4.13	4.14	4.14	4.14	4.14	4.14	0.05
69. WHOLESALE & RETAIL TRADE	12.16	12.56	12.97	13.31	13.58	13.86	2.64
70. FINANCE & INSURANCE	9.36	9.56	9.79	10.08	10.39	10.68	2.67
71. REAL ESTATE & RENTAL	0.47	0.47	0.47	0.48	0.47	0.47	-0.16
72. PERSONAL SERVICES EXC. AUTO.	18.04	18.30	18.63	18.97	19.31	19.61	1.68
73. BUSINESS SERVICES	0.51	0.53	0.55	0.57	0.59	0.60	3.30
76. AMUSEMENTS	1.64	1.65	1.68	1.71	1.73	1.76	1.43
77. MISC. SERVICES	45.91	45.96	46.14	46.65	47.32	48.13	0.95
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	4.54	4.61	4.70	4.80	4.88	4.95	1.74
82. GOVERNMENT INDUSTRY	101.51	101.35	102.37	104.18	105.98	107.64	1.18
TOTAL, ALL INDUSTRIES	306.61	310.96	316.91	323.98	329.44	334.22	1.74

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
33. AIRPLANE PILOTS&FLIGHT ENGINEERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
4. AGR.,FORESTRY,&FISHERY SERV.	0.02	0.02	0.02	0.03	0.03	0.03	6.86
8. CRUDE PETROLEUM & N. GAS	0.04	0.04	0.05	0.05	0.05	0.05	4.55
11. NEW CONSTRUCTION	0.02	0.03	0.03	0.03	0.03	0.04	8.38
13. ORDNANCE & ACCESSORIES	0.33	0.37	0.41	0.44	0.46	0.48	7.74
24. PAPER & ALLIED PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	6.87
27. CHEMICALS & PRODUCTS	0.02	0.02	0.02	0.02	0.02	0.03	7.70
37. PRIMARY FERROUS METALS	0.06	0.07	0.08	0.08	0.09	0.09	7.43
38. NONFERROUS METALS	0.02	0.03	0.03	0.03	0.03	0.04	9.41
41. SCREW MACHINE PROD.&STAMPINGS	0.01	0.01	0.01	0.02	0.02	0.02	7.68
42. OTHER FAB. METAL PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	9.73
43. ENGINES & TURBINES	0.01	0.01	0.01	0.01	0.01	0.01	7.66
47. METALWORKING MACH. & EQ.	0.01	0.01	0.01	0.01	0.01	0.01	9.33
49. GENERAL INDUSTRY MACHINERY	0.01	0.01	0.01	0.01	0.01	0.01	7.54
53. ELECTRICAL MACHINERY	0.01	0.01	0.01	0.01	0.01	0.02	9.23
56. RADIO,TV, & COMMUNICATION EQ.	0.34	0.40	0.44	0.47	0.50	0.51	8.29
57. ELECTRONIC COMPONENTS & ACCESS.	0.04	0.05	0.06	0.06	0.07	0.07	11.35
59. MOTOR VEHICLES & EQUIPMENT	0.01	0.01	0.01	0.02	0.02	0.02	17.14
60. AIRCRAFT & PARTS	0.92	1.04	1.14	1.26	1.35	1.39	8.59
61. OTHER TRANSPORTATION EQ.	0.05	0.05	0.05	0.05	0.05	0.06	3.43
62. INSTRUMENTS & SUPPLIES	0.02	0.03	0.03	0.03	0.03	0.03	7.78
65. TRANSPORTATION & WAREHOUSING	2.31	2.47	2.61	2.81	2.95	3.04	5.66
68. UTILITIES	0.01	0.01	0.01	0.01	0.01	0.01	5.84
69. WHOLESALE & RETAIL TRADE	0.02	0.02	0.02	0.02	0.02	0.03	8.65
70. FINANCE & INSURANCE	0.02	0.02	0.02	0.02	0.03	0.03	10.21
71. REAL ESTATE & RENTAL	0.01	0.01	0.01	0.01	0.01	0.01	6.11
73. BUSINESS SERVICES	0.02	0.02	0.02	0.02	0.03	0.03	8.98
77. MISC. SERVICES	0.01	0.01	0.01	0.01	0.01	0.01	2.38
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.30	0.31	0.33	0.34	0.35	0.36	3.79
82. GOVERNMENT INDUSTRY	2.08	2.04	2.08	2.14	2.18	2.19	1.10
TOTAL, ALL INDUSTRIES	6.81	7.22	7.65	8.16	8.54	8.75	5.14
TOTAL EMPLOYMENT							
4. AGR.,FORESTRY,&FISHERY SERV.	1.10	1.13	1.14	1.17	1.18	1.20	1.76
8. CRUDE PETROLEUM & N. GAS	0.56	0.56	0.56	0.55	0.54	0.55	-0.25
11. NEW CONSTRUCTION	0.64	0.65	0.66	0.68	0.70	0.71	1.97
13. ORDNANCE & ACCESSORIES	0.55	0.56	0.57	0.58	0.59	0.60	1.65

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
33. AIRPLANE PILOTS&FLIGHT ENGINEERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
24. PAPER & ALLIED PRODUCTS	0.43	0.44	0.45	0.45	0.45	0.45	1.03
27. CHEMICALS & PRODUCTS	0.37	0.38	0.38	0.39	0.39	0.39	1.18
37. PRIMARY FERROUS METALS	0.88	0.91	0.93	0.94	0.94	0.93	1.08
38. NONFERROUS METALS	0.26	0.27	0.29	0.29	0.30	0.30	2.81
41. SCREW MACHINE PROD.&STAMPINGS	0.19	0.20	0.20	0.21	0.21	0.21	2.15
42. OTHER FAB. METAL PRODUCTS	0.14	0.15	0.15	0.16	0.16	0.16	3.03
43. ENGINES & TURBINES	0.12	0.13	0.13	0.13	0.13	0.13	1.72
47. METALWORKING MACH. & EQ.	0.13	0.13	0.14	0.15	0.15	0.15	3.73
49. GENERAL INDUSTRY MACHINERY	0.19	0.19	0.20	0.20	0.21	0.21	2.64
53. ELECTRICAL MACHINERY	0.19	0.20	0.21	0.21	0.21	0.22	2.17
56. RADIO,TV, & COMMUNICATION EQ.	0.81	0.83	0.86	0.88	0.89	0.90	2.13
57. ELECTRONIC COMPONENTS & ACCESS.	0.20	0.20	0.21	0.22	0.23	0.23	3.63
59. MOTOR VEHICLES & EQUIPMENT	0.53	0.55	0.57	0.58	0.59	0.59	2.23
60. AIRCRAFT & PARTS	1.84	1.91	1.97	2.03	2.03	2.03	1.99
61. OTHER TRANSPORTATION EQ.	0.16	0.17	0.18	0.18	0.18	0.18	2.02
62. INSTRUMENTS & SUPPLIES	0.19	0.19	0.20	0.21	0.21	0.22	2.34
65. TRANSPORTATION & WAREHOUSING	54.33	56.26	58.13	60.27	61.37	62.09	2.70
68. UTILITIES	0.36	0.36	0.36	0.36	0.36	0.36	-0.10
69. WHOLESALE & RETAIL TRADE	2.73	2.79	2.85	2.90	2.93	2.96	1.67
70. FINANCE & INSURANCE	1.97	2.02	2.07	2.14	2.22	2.29	3.07
71. REAL ESTATE & RENTAL	0.33	0.33	0.33	0.33	0.33	0.33	-0.13
73. BUSINESS SERVICES	0.37	0.38	0.40	0.41	0.43	0.44	3.57
77. MISC. SERVICES	1.97	1.96	1.96	1.97	1.99	2.02	0.46
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	3.35	3.45	3.55	3.66	3.72	3.77	2.34
82. GOVERNMENT INDUSTRY	6.57	6.55	6.61	6.72	6.83	6.92	1.05
TOTAL, ALL INDUSTRIES	85.52	88.03	90.55	93.35	94.89	95.99	2.34

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE
BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
34. AIR TRAFFIC CONTROLLERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
82. GOVERNMENT INDUSTRY	0.47	0.46	0.47	0.49	0.50	0.51	1.60
TOTAL, ALL INDUSTRIES	0.47	0.46	0.47	0.49	0.50	0.51	1.60
TOTAL EMPLOYMENT							
82. GOVERNMENT INDUSTRY	46.10	46.35	47.14	48.35	49.55	50.57	1.87
TOTAL, ALL INDUSTRIES	46.10	46.35	47.14	48.35	49.55	50.57	1.87

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
35. RADIO OPERATORS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
65. TRANSPORTATION & WAREHOUSING	0.06	0.06	0.06	0.06	0.07	0.07	4.00
66. COMMUNICATION EXC. RADIO & TV	0.02	0.02	0.02	0.03	0.03	0.03	6.85
82. GOVERNMENT INDUSTRY	0.04	0.04	0.04	0.04	0.04	0.04	1.56
TOTAL, ALL INDUSTRIES	0.12	0.12	0.13	0.13	0.14	0.14	3.74
TOTAL EMPLOYMENT							
65. TRANSPORTATION & WAREHOUSING	1.30	1.33	1.35	1.37	1.38	1.37	1.09
66. COMMUNICATION EXC. RADIO & TV	0.85	0.87	0.91	0.93	0.97	0.99	3.09
82. GOVERNMENT INDUSTRY	2.50	2.48	2.49	2.50	2.52	2.56	0.44
TOTAL, ALL INDUSTRIES	4.79	4.81	4.88	4.95	5.01	5.06	1.13

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
36. TECHNICAL ASSISTANTS, LIBRARY
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
77. MISC. SERVICES	0.22	0.22	0.23	0.23	0.24	0.24	2.36
82. GOVERNMENT INDUSTRY	1.78	1.68	1.65	1.64	1.61	1.56	-2.60
TOTAL, ALL INDUSTRIES	1.99	1.90	1.88	1.87	1.85	1.80	-2.00
TOTAL EMPLOYMENT							
77. MISC. SERVICES	33.71	33.57	33.53	33.73	34.04	34.45	0.43
82. GOVERNMENT INDUSTRY	7.78	7.53	7.37	7.27	7.17	7.02	-2.06
TOTAL, ALL INDUSTRIES	41.50	41.11	40.91	41.01	41.22	41.47	-0.01

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
37. TOOL PROGRAMMERS-NUMERICAL CONTROL
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	0.29	0.33	0.36	0.39	0.41	0.43	7.97
27. CHEMICALS & PRODUCTS	0.02	0.03	0.03	0.03	0.03	0.04	7.95
40. FAB. STRUCTURAL METAL PRODUCTS	0.01	0.01	0.02	0.02	0.02	0.02	7.53
41. SCREW MACHINE PROD.&STAMPINGS	0.01	0.01	0.01	0.01	0.01	0.01	7.72
42. OTHER FAB. METAL PRODUCTS	0.01	0.01	0.01	0.01	0.02	0.02	10.16
43. ENGINES & TURBINES	0.01	0.01	0.01	0.01	0.01	0.01	7.66
45. CONSTR. & MINING MACHINERY	0.01	0.01	0.01	0.01	0.01	0.01	7.24
46. MATERIALS HANDLING MACH. & EQ.	0.01	0.01	0.01	0.01	0.01	0.01	9.11
47. METALWORKING MACH. & EQ.	0.05	0.06	0.07	0.08	0.08	0.08	9.37
49. GENERAL INDUSTRY MACHINERY	0.02	0.02	0.03	0.03	0.03	0.03	7.51
50. MISC. NONELECTRICAL MACH.	0.03	0.04	0.04	0.04	0.05	0.05	7.54
51. OFFICE,COMPUTING & ACCT. MACH.	0.02	0.02	0.02	0.02	0.02	0.02	7.33
53. ELECTRICAL MACHINERY	0.01	0.01	0.01	0.01	0.01	0.01	9.06
56. RADIO,TV, & COMMUNICATION EQ.	0.13	0.15	0.17	0.18	0.19	0.20	8.25
57. ELECTRONIC COMPONENTS & ACCESS.	0.06	0.07	0.08	0.09	0.10	0.11	11.37
60. AIRCRAFT & PARTS	0.44	0.50	0.55	0.60	0.64	0.66	8.59
61. OTHER TRANSPORTATION EQ.	0.07	0.07	0.07	0.07	0.08	0.08	3.40
62. INSTRUMENTS & SUPPLIES	0.04	0.04	0.05	0.05	0.06	0.06	8.00
77. MISC. SERVICES	0.01	0.01	0.01	0.01	0.01	0.01	3.60
TOTAL, ALL INDUSTRIES	1.29	1.46	1.59	1.74	1.85	1.92	8.23
TOTAL EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	0.48	0.50	0.50	0.52	0.52	0.53	1.86
27. CHEMICALS & PRODUCTS	0.51	0.52	0.53	0.54	0.55	0.55	1.41
40. FAB. STRUCTURAL METAL PRODUCTS	0.29	0.29	0.30	0.31	0.32	0.32	1.80
41. SCREW MACHINE PROD.&STAMPINGS	0.14	0.15	0.15	0.16	0.16	0.16	2.19
42. OTHER FAB. METAL PRODUCTS	0.22	0.23	0.24	0.25	0.26	0.26	3.43
43. ENGINES & TURBINES	0.11	0.11	0.12	0.12	0.12	0.12	1.73
45. CONSTR. & MINING MACHINERY	0.45	0.48	0.50	0.52	0.54	0.54	3.64
46. MATERIALS HANDLING MACH. & EQ.	0.16	0.17	0.18	0.18	0.19	0.19	3.62
47. METALWORKING MACH. & EQ.	1.05	1.09	1.16	1.20	1.24	1.26	3.77
49. GENERAL INDUSTRY MACHINERY	0.49	0.50	0.53	0.54	0.55	0.56	2.61
50. MISC. NONELECTRICAL MACH.	0.30	0.30	0.32	0.32	0.33	0.33	2.24
51. OFFICE,COMPUTING & ACCT. MACH.	0.43	0.45	0.47	0.48	0.48	0.49	2.74
53. ELECTRICAL MACHINERY	0.14	0.14	0.15	0.15	0.15	0.15	2.01
56. RADIO,TV, & COMMUNICATION EQ.	0.31	0.32	0.33	0.34	0.34	0.34	2.10

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
37. TOOL PROGRAMMERS-NUMERICAL CONTROL
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
57. ELECTRONIC COMPONENTS & ACCESS.	0.29	0.30	0.31	0.33	0.33	0.34	3.65
60. AIRCRAFT & PARTS	0.88	0.91	0.94	0.97	0.97	0.97	1.99
61. OTHER TRANSPORTATION EQ.	0.23	0.24	0.25	0.25	0.25	0.26	1.99
62. INSTRUMENTS & SUPPLIES	0.34	0.35	0.36	0.37	0.38	0.39	2.55
77. MISC. SERVICES	1.10	1.11	1.13	1.15	1.17	1.20	1.66
TOTAL, ALL INDUSTRIES	10.32	10.58	10.92	11.20	11.38	11.54	2.26

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
38. ALL OTHER TECHNICIANS NEC
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
6. NONFERROUS METAL MINING	0.01	0.01	0.02	0.02	0.02	0.02	11.52
8. CRUDE PETROLEUM & N. GAS	0.05	0.06	0.06	0.06	0.06	0.06	3.56
11. NEW CONSTRUCTION	0.04	0.04	0.05	0.05	0.06	0.06	8.60
13. ORDNANCE & ACCESSORIES	0.43	0.49	0.53	0.57	0.59	0.61	7.32
16. FABRIC,YARN & THREAD MILLS	0.01	0.01	0.01	0.01	0.01	0.01	6.08
24. PAPER & ALLIED PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	6.87
26. PRINTING & PUBLISHING	0.01	0.01	0.01	0.01	0.01	0.01	4.97
27. CHEMICALS & PRODUCTS	0.03	0.03	0.03	0.03	0.04	0.04	7.68
28. PLASTICS & SYNTHETIC MATLS.	0.03	0.04	0.04	0.05	0.05	0.05	8.70
30. PAINTS & ALLIED PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	8.24
31. PET REFINING & REL. PROD.	0.01	0.01	0.01	0.01	0.01	0.01	5.32
32. RUBBER & MISC. PLASTICS PROD.	0.02	0.03	0.03	0.03	0.04	0.04	10.38
35. GLASS & GLASS PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	8.38
36. STONE & CLAY PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	8.20
37. PRIMARY FERROUS METALS	0.02	0.03	0.03	0.03	0.03	0.04	7.43
38. NONFERROUS METALS	0.08	0.09	0.10	0.11	0.12	0.13	9.62
40. FAB. STRUCTURAL METAL PRODUCTS	0.03	0.03	0.04	0.04	0.04	0.04	7.61
42. OTHER FAB. METAL PRODUCTS	0.02	0.02	0.02	0.02	0.02	0.03	9.71
43. ENGINES & TURBINES	0.01	0.02	0.02	0.02	0.02	0.02	7.72
46. MATERIALS HANDLING MACH. & EQ.	0.01	0.01	0.01	0.01	0.01	0.01	9.11
47. METALWORKING MACH. & EQ.	0.01	0.01	0.01	0.01	0.01	0.01	9.40
49. GENERAL INDUSTRY MACHINERY	0.01	0.02	0.02	0.02	0.02	0.02	7.53
50. MISC. NONELECTRICAL MACH.	0.01	0.01	0.01	0.01	0.01	0.01	7.61
53. ELECTRICAL MACHINERY	0.02	0.02	0.03	0.03	0.03	0.03	9.24
56. RADIO,TV, & COMMUNICATION EQ.	1.12	1.29	1.42	1.54	1.63	1.66	8.27
57. ELECTRONIC COMPONENTS & ACCESS.	0.09	0.11	0.13	0.14	0.15	0.16	11.37
58. MISC. ELECTRICAL MACH. & EQ.	0.01	0.01	0.01	0.01	0.01	0.01	9.58
59 MOTOR VEHICLES & EQUIPMENT	0.01	0.01	0.01	0.01	0.02	0.02	17.15
60. AIRCRAFT & PARTS	0.82	0.92	1.02	1.12	1.20	1.23	8.59
61. OTHER TRANSPORTATION EQ.	0.12	0.13	0.13	0.13	0.14	0.14	3.38
62. INSTRUMENTS & SUPPLIES	0.11	0.12	0.13	0.14	0.15	0.15	7.70
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.04	0.04	0.04	0.05	0.05	0.06	8.49
65. TRANSPORTATION & WAREHOUSING	0.30	0.32	0.34	0.37	0.39	0.41	6.37
66. COMMUNICATION EXC. RADIO & TV	0.02	0.02	0.02	0.02	0.03	0.03	6.40
67. RADIO & TV BROADCASTING	0.01	0.01	0.01	0.01	0.01	0.01	8.20
68. UTILITIES	0.08	0.09	0.10	0.10	0.11	0.11	6.01
69. WHOLESALE & RETAIL TRADE	0.06	0.06	0.07	0.08	0.09	0.09	10.00

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
38. ALL OTHER TECHNICIANS NEC
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
70. FINANCE & INSURANCE	0.06	0.07	0.08	0.09	0.10	0.10	9.66
72. PERSONAL SERVICES EXC. AUTO.	0.33	0.37	0.40	0.43	0.46	0.49	8.21
76. AMUSEMENTS	0.01	0.02	0.02	0.02	0.02	0.02	7.55
77. MISC. SERVICES	0.06	0.06	0.06	0.07	0.07	0.07	4.74
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.11	0.11	0.11	0.12	0.12	0.12	2.37
82. GOVERNMENT INDUSTRY	8.00	7.87	8.05	8.30	8.47	8.56	1.35
TOTAL, ALL INDUSTRIES	12.30	12.70	13.31	14.02	14.54	14.83	3.81

TOTAL EMPLOYMENT

6. NONFERROUS METAL MINING	0.21	0.23	0.24	0.25	0.24	0.25	2.90
8. CRUDE PETROLEUM & N. GAS	0.73	0.73	0.72	0.70	0.69	0.69	-1.19
11. NEW CONSTRUCTION	1.04	1.06	1.08	1.11	1.14	1.16	2.17
13. ORDNANCE & ACCESSORIES	0.71	0.73	0.74	0.75	0.75	0.76	1.25
16. FABRIC, YARN & THREAD MILLS	0.61	0.63	0.66	0.68	0.69	0.69	2.66
24. PAPER & ALLIED PRODUCTS	0.52	0.54	0.55	0.55	0.55	0.55	1.03
26. PRINTING & PUBLISHING	0.72	0.71	0.71	0.71	0.70	0.70	-0.59
27. CHEMICALS & PRODUCTS	0.53	0.54	0.55	0.56	0.56	0.56	1.16
28. PLASTICS & SYNTHETIC MATLS.	1.38	1.43	1.49	1.52	1.54	1.55	2.31
30. PAINTS & ALLIED PRODUCTS	0.11	0.11	0.12	0.12	0.13	0.13	3.02
31. PET REFINING & REL. PROD.	0.21	0.21	0.21	0.21	0.21	0.21	0.38
32. RUBBER & MISC. PLASTICS PROD.	0.84	0.86	0.90	0.93	0.96	0.97	2.95
35. GLASS & GLASS PRODUCTS	0.26	0.26	0.26	0.26	0.26	0.25	-0.25
36. STONE & CLAY PRODUCTS	0.31	0.31	0.32	0.33	0.33	0.32	0.97
37. PRIMARY FERROUS METALS	0.35	0.36	0.37	0.37	0.37	0.37	1.09
38. NONFERROUS METALS	0.96	1.00	1.04	1.07	1.09	1.11	3.01
40. FAB. STRUCTURAL METAL PRODUCTS	0.69	0.69	0.71	0.73	0.75	0.76	1.88
42. OTHER FAB. METAL PRODUCTS	0.35	0.36	0.37	0.38	0.39	0.40	3.01
43. ENGINES & TURBINES	0.17	0.17	0.18	0.18	0.18	0.18	1.78
46. MATERIALS HANDLING MACH. & EQ.	0.12	0.12	0.13	0.14	0.14	0.14	3.62
47. METALWORKING MACH. & EQ.	0.16	0.17	0.18	0.19	0.19	0.20	3.80
49. GENERAL INDUSTRY MACHINERY	0.31	0.32	0.33	0.34	0.35	0.35	2.63
50. MISC. NONELECTRICAL MACH.	0.07	0.07	0.08	0.08	0.08	0.08	2.30
53. ELECTRICAL MACHINERY	0.43	0.44	0.46	0.47	0.48	0.48	2.18
56. RADIO, TV, & COMMUNICATION EQ.	2.65	2.72	2.81	2.86	2.89	2.94	2.11
57. ELECTRONIC COMPONENTS & ACCESS.	0.43	0.45	0.47	0.49	0.51	0.52	3.65
58. MISC. ELECTRICAL MACH. & EQ.	0.35	0.36	0.37	0.38	0.38	0.39	2.13
59. MOTOR VEHICLES & EQUIPMENT	0.47	0.49	0.51	0.51	0.52	0.52	2.23
60. AIRCRAFT & PARTS	1.63	1.70	1.74	1.80	1.80	1.80	2.00

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
38. ALL OTHER TECHNICIANS NEC
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
61. OTHER TRANSPORTATION EQ.	0.41	0.42	0.44	0.45	0.45	0.45	1.96
62. INSTRUMENTS & SUPPLIES	0.91	0.93	0.96	0.99	1.01	1.02	2.27
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.86	0.87	0.90	0.94	0.97	1.00	3.13
65. TRANSPORTATION & WAREHOUSING	7.07	7.37	7.67	8.00	8.20	8.35	3.39
66. COMMUNICATION EXC. RADIO & TV	0.77	0.78	0.81	0.83	0.86	0.88	2.66
67. RADIO & TV BROADCASTING	0.31	0.32	0.33	0.33	0.33	0.34	1.76
68. UTILITIES	3.77	3.78	3.78	3.78	3.79	3.79	0.06
69. WHOLESALE & RETAIL TRADE	9.34	9.68	10.02	10.31	10.55	10.80	2.93
70. FINANCE & INSURANCE	7.39	7.54	7.72	7.94	8.17	8.39	2.56
72. PERSONAL SERVICES EXC. AUTO.	17.85	18.10	18.43	18.76	19.10	19.40	1.68
76. AMUSEMENTS	1.53	1.53	1.56	1.59	1.61	1.64	1.41
77. MISC. SERVICES	9.12	9.31	9.52	9.80	10.12	10.46	2.77
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.77	0.78	0.79	0.81	0.82	0.84	1.75
82. GOVERNMENT INDUSTRY	37.48	37.27	37.48	37.91	38.36	38.90	0.75
TOTAL, ALL INDUSTRIES	117.79	119.43	121.76	124.26	126.39	128.45	1.75

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE
BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
39. COMPUTER SPECIALISTS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
5. IRON ORE MINING	0.01	0.01	0.01	0.01	0.01	0.01	8.51
6. NONFERROUS METAL MINING	0.01	0.01	0.02	0.02	0.02	0.02	10.57
7. COAL MINING	0.01	0.01	0.01	0.01	0.02	0.02	9.23
8. CRUDE PETROLEUM & N. GAS	0.21	0.23	0.25	0.28	0.30	0.32	9.18
11. NEW CONSTRUCTION	0.09	0.11	0.12	0.13	0.14	0.15	10.08
13. ORDNANCE & ACCESSORIES	2.21	2.60	2.93	3.27	3.55	3.79	11.38
14. FOOD & KINDRED PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	5.27
16. FABRIC,YARN & THREAD MILLS	0.01	0.01	0.01	0.01	0.01	0.01	6.46
18. APPAREL	0.01	0.01	0.01	0.01	0.01	0.01	7.86
20. LUMBER & WOOD PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	10.81
24. PAPER & ALLIED PRODUCTS	0.02	0.03	0.03	0.03	0.03	0.04	9.37
26. PRINTING & PUBLISHING	0.07	0.08	0.09	0.10	0.10	0.11	7.57
27. CHEMICALS & PRODUCTS	0.16	0.18	0.19	0.22	0.24	0.25	10.09
28. PLASTICS & SYNTHETIC MATLS.	0.03	0.04	0.04	0.05	0.05	0.06	13.14
29. DRUGS,CLEANING & TOILET PREP.	0.01	0.01	0.02	0.02	0.02	0.02	7.54
30. PAINTS & ALLIED PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	8.26
31. PET REFINING & REL. PROD.	0.10	0.12	0.14	0.15	0.17	0.19	12.43
32. RUBBER & MISC. PLASTICS PROD.	0.04	0.04	0.05	0.06	0.06	0.07	11.84
35. GLASS & GLASS PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	9.60
36. STONE & CLAY PRODUCTS	0.02	0.02	0.03	0.03	0.03	0.03	7.65
37. PRIMARY FERROUS METALS	0.12	0.13	0.15	0.16	0.18	0.19	9.60
38. NONFERROUS METALS	0.09	0.11	0.12	0.14	0.15	0.16	12.19
40. FAB. STRUCTURAL METAL PRODUCTS	0.08	0.09	0.10	0.10	0.11	0.12	9.42
41. SCREW MACHINE PROD.&STAMPINGS	0.03	0.03	0.04	0.04	0.04	0.04	7.74
42. OTHER FAB. METAL PRODUCTS	0.04	0.05	0.05	0.06	0.07	0.07	10.06
43. ENGINES & TURBINES	0.06	0.07	0.08	0.09	0.09	0.10	10.33
45. CONSTR. & MINING MACHINERY	0.02	0.02	0.02	0.02	0.03	0.03	10.07
46. MATERIALS HANDLING MACH. & EQ.	0.03	0.03	0.04	0.04	0.05	0.05	12.00
47. METALWORKING MACH. & EQ.	0.05	0.06	0.07	0.08	0.09	0.09	11.69
49. GENERAL INDUSTRY MACHINERY	0.06	0.06	0.07	0.07	0.08	0.08	8.60
50. MISC. NONELECTRICAL MACH.	0.02	0.03	0.03	0.03	0.03	0.03	7.55
51. OFFICE,COMPUTING & ACCT. MACH.	0.94	1.09	1.20	1.30	1.37	1.42	8.60
52. SERVICE INDUSTRY MACHINES	0.01	0.01	0.01	0.02	0.02	0.02	16.38
53. ELECTRICAL MACHINERY	0.08	0.09	0.10	0.11	0.12	0.13	10.51
55. ELECTRIC LIGHTING & WIRING EQ.	0.03	0.04	0.04	0.05	0.05	0.05	9.16
56. RADIO,TV, & COMMUNICATION EQ.	3.39	4.08	4.68	5.28	5.77	6.10	12.47
57. ELECTRONIC COMPONENTS & ACCESS.	0.61	0.75	0.87	1.01	1.13	1.22	14.94

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
39. COMPUTER SPECIALISTS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
58. MISC. ELECTRICAL MACH. & EQ.	0.02	0.02	0.02	0.03	0.03	0.03	12.58
59. MOTOR VEHICLES & EQUIPMENT	0.05	0.05	0.06	0.07	0.09	0.10	17.28
60. AIRCRAFT & PARTS	2.85	3.38	3.90	4.49	5.00	5.33	13.35
61. OTHER TRANSPORTATION EQ.	0.18	0.20	0.20	0.21	0.22	0.22	4.13
62. INSTRUMENTS & SUPPLIES	0.55	0.63	0.69	0.76	0.82	0.85	9.07
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.05	0.05	0.06	0.07	0.07	0.08	11.44
64. MISC. MANUFACTURING	0.01	0.01	0.01	0.01	0.01	0.01	8.92
65. TRANSPORTATION & WAREHOUSING	0.29	0.32	0.34	0.37	0.39	0.41	7.09
66. COMMUNICATION EXC. RADIO & TV	0.22	0.24	0.26	0.29	0.32	0.34	9.35
67. RADIO & TV BROADCASTING	0.02	0.02	0.03	0.03	0.03	0.03	10.15
68. UTILITIES	0.16	0.18	0.20	0.22	0.24	0.25	9.14
69. WHOLESALE & RETAIL TRADE	0.33	0.38	0.43	0.48	0.54	0.57	11.92
70. FINANCE & INSURANCE	0.48	0.55	0.62	0.70	0.78	0.83	11.59
71. REAL ESTATE & RENTAL	0.01	0.01	0.01	0.01	0.01	0.01	10.05
72. PERSONAL SERVICES EXC. AUTO.	0.02	0.02	0.03	0.03	0.03	0.04	12.42
73. BUSINESS SERVICES	4.03	4.76	5.46	6.28	6.99	7.52	13.31
77. MISC. SERVICES	0.36	0.39	0.42	0.45	0.49	0.51	7.26
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.27	0.30	0.33	0.36	0.38	0.40	8.33
82. GOVERNMENT INDUSTRY	22.32	23.15	24.87	26.84	28.56	30.02	6.10
TOTAL, ALL INDUSTRIES	40.97	45.01	49.63	54.81	59.26	62.71	8.89

TOTAL EMPLOYMENT

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
5. IRON ORE MINING	0.14	0.15	0.16	0.16	0.16	0.16	2.31
6. NONFERROUS METAL MINING	0.21	0.22	0.23	0.24	0.24	0.24	2.03
7. COAL MINING	0.36	0.38	0.40	0.41	0.42	0.43	3.53
8. CRUDE PETROLEUM & N. GAS	2.78	2.93	3.07	3.15	3.25	3.41	4.17
11. NEW CONSTRUCTION	2.50	2.59	2.67	2.79	2.90	2.97	3.57
13. ORDNANCE & ACCESSORIES	3.66	3.88	4.09	4.32	4.51	4.69	5.08
14. FOOD & KINDRED PRODUCTS	1.73	1.76	1.77	1.77	1.75	1.74	0.14
16. FABRIC,YARN & THREAD MILLS	0.58	0.60	0.63	0.65	0.66	0.67	3.02
18. APPAREL	1.40	1.43	1.49	1.55	1.57	1.60	2.74
20. LUMBER & WOOD PRODUCTS	0.39	0.44	0.46	0.49	0.50	0.50	4.90
24. PAPER & ALLIED PRODUCTS	1.24	1.31	1.36	1.40	1.43	1.46	3.39
26. PRINTING & PUBLISHING	4.68	4.77	4.87	4.97	5.06	5.14	1.88
27. CHEMICALS & PRODUCTS	3.25	3.40	3.53	3.65	3.75	3.84	3.42
28. PLASTICS & SYNTHETIC MATLS.	1.30	1.40	1.52	1.62	1.70	1.77	6.49
29. DRUGS,CLEANING & TOILET PREP.	3.84	4.01	4.21	4.40	4.54	4.68	4.02
30. PAINTS & ALLIED PRODUCTS	0.14	0.15	0.15	0.16	0.16	0.16	3.03

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
39. COMPUTER SPECIALISTS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
31. PET REFINING & REL. PROD.	1.95	2.09	2.26	2.43	2.60	2.75	7.15
32. RUBBER & MISC. PLASTICS PROD.	1.40	1.47	1.55	1.63	1.69	1.73	4.31
35. GLASS & GLASS PRODUCTS	0.29	0.29	0.30	0.30	0.30	0.30	0.87
36. STONE & CLAY PRODUCTS	0.65	0.66	0.67	0.68	0.68	0.66	0.46
37. PRIMARY FERROUS METALS	1.66	1.75	1.83	1.89	1.92	1.94	3.13
38. NONFERROUS METALS	1.07	1.14	1.22	1.29	1.34	1.39	5.42
40. FAB. STRUCTURAL METAL PRODUCTS	1.72	1.76	1.83	1.92	1.99	2.05	3.59
41. SCREW MACHINE PROD.&STAMPINGS	0.48	0.50	0.52	0.53	0.53	0.53	2.21
42. OTHER FAB. METAL PRODUCTS	0.95	0.98	1.02	1.06	1.09	1.11	3.33
43. ENGINES & TURBINES	0.72	0.76	0.81	0.84	0.87	0.89	4.25
45. CONSTR. & MINING MACHINERY	1.39	1.52	1.64	1.74	1.83	1.90	6.38
46. MATERIALS HANDLING MACH. & EQ.	0.50	0.53	0.58	0.62	0.65	0.68	6.35
47. METALWORKING MACH. & EQ.	1.01	1.08	1.17	1.24	1.30	1.35	5.97
49. GENERAL INDUSTRY MACHINERY	1.27	1.31	1.39	1.44	1.48	1.52	3.65
50. MISC. NONELECTRICAL MACH.	0.21	0.21	0.22	0.22	0.23	0.23	2.24
51. OFFICE,COMPUTING & ACCT. MACH.	24.89	26.24	27.69	28.53	29.24	30.21	3.95
52. SERVICE INDUSTRY MACHINES	0.57	0.61	0.66	0.69	0.71	0.72	4.82
53. ELECTRICAL MACHINERY	1.57	1.62	1.71	1.77	1.81	1.85	3.37
55. ELECTRIC LIGHTING & WIRING EQ.	0.72	0.73	0.76	0.78	0.80	0.82	2.55
56. RADIO,TV, & COMMUNICATION EQ.	8.03	8.60	9.25	9.79	10.25	10.79	6.08
57. ELECTRONIC COMPONENTS & ACCESS.	2.78	3.01	3.26	3.50	3.71	3.89	6.97
58. MISC. ELECTRICAL MACH. & EQ.	0.62	0.66	0.71	0.74	0.77	0.79	4.93
59. MOTOR VEHICLES & EQUIPMENT	2.35	2.46	2.55	2.59	2.62	2.64	2.35
60. AIRCRAFT & PARTS	5.71	6.22	6.69	7.20	7.52	7.81	6.47
61. OTHER TRANSPORTATION EQ.	0.63	0.66	0.69	0.71	0.71	0.72	2.71
62. INSTRUMENTS & SUPPLIES	4.76	4.88	5.11	5.35	5.54	5.67	3.57
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	1.08	1.13	1.21	1.30	1.38	1.45	5.93
64. MISC. MANUFACTURING	0.82	0.86	0.92	0.97	1.01	1.04	4.77
65. TRANSPORTATION & WAREHOUSING	6.86	7.21	7.55	7.93	8.18	8.38	4.09
66. COMMUNICATION EXC. RADIO & TV	8.74	9.20	9.82	10.31	10.94	11.43	5.50
67. RADIO & TV BROADCASTING	1.02	1.08	1.13	1.16	1.19	1.22	3.60
68. UTILITIES	7.54	7.80	8.04	8.28	8.52	8.75	3.02
69. WHOLESALE & RETAIL TRADE	53.49	56.52	59.57	62.38	64.86	67.39	4.73
70. FINANCE & INSURANCE	55.81	58.06	60.53	63.34	66.25	69.09	4.36
71. REAL ESTATE & RENTAL	0.34	0.35	0.36	0.38	0.39	0.40	3.58
72. PERSONAL SERVICES EXC. AUTO.	1.13	1.19	1.27	1.34	1.41	1.48	5.65
73. BUSINESS SERVICES	82.98	90.07	97.54	105.66	113.24	120.14	7.68
77. MISC. SERVICES	56.17	58.92	61.81	65.14	68.72	72.53	5.25
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	4.55	4.79	5.06	5.32	5.57	5.82	5.04

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
39. COMPUTER SPECIALISTS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
82. GOVERNMENT INDUSTRY	82.46	85.70	89.88	94.75	99.67	104.56	4.86
TOTAL, ALL INDUSTRIES	464.41	489.61	517.25	545.56	572.40	598.57	5.21

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

Page 4

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
40. COMPUTER PROGRAMMERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
6. NONFERROUS METAL MINING	0.01	0.01	0.01	0.01	0.01	0.01	10.33
8. CRUDE PETROLEUM & N. GAS	0.08	0.09	0.09	0.10	0.11	0.11	6.87
11. NEW CONSTRUCTION	0.05	0.05	0.06	0.06	0.07	0.07	9.83
13. ORDNANCE & ACCESSORIES	0.79	0.89	0.98	1.06	1.12	1.17	8.14
14. FOOD & KINDRED PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	5.42
24. PAPER & ALLIED PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	6.69
26. PRINTING & PUBLISHING	0.04	0.05	0.05	0.06	0.06	0.06	6.68
27. CHEMICALS & PRODUCTS	0.07	0.07	0.08	0.08	0.09	0.09	7.42
28. PLASTICS & SYNTHETIC MATLS.	0.01	0.02	0.02	0.02	0.02	0.02	8.72
31. PET REFINING & REL. PROD.	0.04	0.04	0.04	0.05	0.05	0.06	9.94
32. RUBBER & MISC. PLASTICS PROD.	0.02	0.02	0.03	0.03	0.03	0.03	10.29
36. STONE & CLAY PRODUCTS	0.01	0.01	0.02	0.02	0.02	0.02	7.74
37. PRIMARY FERROUS METALS	0.05	0.06	0.06	0.07	0.07	0.07	7.46
38. NONFERROUS METALS	0.04	0.04	0.05	0.05	0.06	0.06	9.60
40. FAB. STRUCTURAL METAL PRODUCTS	0.04	0.05	0.05	0.06	0.06	0.06	7.89
41. SCREW MACHINE PROD.&STAMPINGS	0.02	0.02	0.02	0.02	0.03	0.03	7.75
42. OTHER FAB. METAL PRODUCTS	0.03	0.03	0.03	0.04	0.04	0.04	10.04
43. ENGINES & TURBINES	0.03	0.04	0.04	0.05	0.05	0.05	7.71
45. CONSTR. & MINING MACHINERY	0.01	0.01	0.01	0.01	0.01	0.01	8.58
46. MATERIALS HANDLING MACH. & EQ.	0.02	0.02	0.02	0.02	0.02	0.02	10.48
47. METALWORKING MACH. & EQ.	0.03	0.04	0.04	0.05	0.05	0.05	9.37
49. GENERAL INDUSTRY MACHINERY	0.03	0.04	0.04	0.04	0.04	0.05	7.51
50. MISC. NONELECTRICAL MACH.	0.02	0.02	0.02	0.03	0.03	0.03	7.56
51. OFFICE,COMPUTING & ACCT. MACH.	0.69	0.80	0.88	0.95	1.00	1.04	8.47
53. ELECTRICAL MACHINERY	0.04	0.05	0.05	0.06	0.06	0.07	9.12
55. ELECTRIC LIGHTING & WIRING EQ.	0.02	0.02	0.02	0.03	0.03	0.03	8.26
56. RADIO,TV, & COMMUNICATION EQ.	1.37	1.62	1.83	2.04	2.20	2.31	10.97
57. ELECTRONIC COMPONENTS & ACCESS.	0.38	0.47	0.54	0.62	0.70	0.75	14.23
58. MISC. ELECTRICAL MACH. & EQ.	0.01	0.01	0.01	0.01	0.01	0.02	9.57
59. MOTOR VEHICLES & EQUIPMENT	0.03	0.03	0.03	0.04	0.05	0.06	17.15
60. AIRCRAFT & PARTS	1.19	1.38	1.56	1.77	1.94	2.04	11.31
61. OTHER TRANSPORTATION EQ.	0.08	0.09	0.09	0.09	0.10	0.10	3.30
62. INSTRUMENTS & SUPPLIES	0.41	0.46	0.50	0.54	0.58	0.59	7.78
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.02	0.03	0.03	0.03	0.03	0.03	8.65
65. TRANSPORTATION & WAREHOUSING	0.14	0.15	0.16	0.18	0.19	0.19	6.19
66. COMMUNICATION EXC. RADIO & TV	0.10	0.11	0.11	0.12	0.13	0.14	6.22
67. RADIO & TV BROADCASTING	0.01	0.01	0.02	0.02	0.02	0.02	9.44

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
40. COMPUTER PROGRAMMERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
68. UTILITIES	0.08	0.09	0.09	0.10	0.11	0.11	7.54
69. WHOLESALE & RETAIL TRADE	0.13	0.15	0.17	0.19	0.21	0.22	10.63
70. FINANCE & INSURANCE	0.26	0.30	0.33	0.37	0.41	0.43	10.68
72. PERSONAL SERVICES EXC. AUTO.	0.01	0.01	0.01	0.01	0.02	0.02	14.19
73. BUSINESS SERVICES	2.30	2.71	3.11	3.56	3.96	4.26	13.10
77. MISC. SERVICES	0.23	0.25	0.27	0.29	0.31	0.33	6.94
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.11	0.12	0.13	0.14	0.15	0.15	7.84
82. GOVERNMENT INDUSTRY	17.86	18.52	19.90	21.47	22.85	24.01	6.10
TOTAL, ALL INDUSTRIES	27.01	29.11	31.74	34.70	37.22	39.17	7.72
TOTAL EMPLOYMENT							
6. NONFERROUS METAL MINING	0.10	0.11	0.11	0.11	0.11	0.11	1.80
8. CRUDE PETROLEUM & N. GAS	1.07	1.09	1.12	1.13	1.14	1.17	1.96
11. NEW CONSTRUCTION	1.22	1.26	1.30	1.36	1.41	1.44	3.34
13. ORDNANCE & ACCESSORIES	1.30	1.34	1.37	1.40	1.42	1.44	2.02
14. FOOD & KINDRED PRODUCTS	1.00	1.01	1.02	1.02	1.02	1.01	0.29
24. PAPER & ALLIED PRODUCTS	0.58	0.59	0.60	0.60	0.60	0.60	0.86
26. PRINTING & PUBLISHING	2.80	2.83	2.86	2.90	2.92	2.95	1.03
27. CHEMICALS & PRODUCTS	1.36	1.38	1.40	1.41	1.42	1.42	0.91
28. PLASTICS & SYNTHETIC MATLS.	0.56	0.58	0.60	0.62	0.63	0.63	2.33
31. PET REFINING & REL. PROD.	0.66	0.69	0.73	0.77	0.80	0.84	4.78
32. RUBBER & MISC. PLASTICS PROD.	0.75	0.77	0.81	0.83	0.85	0.86	2.86
36. STONE & CLAY PRODUCTS	0.40	0.41	0.41	0.42	0.42	0.42	0.54
37. PRIMARY FERROUS METALS	0.72	0.74	0.76	0.77	0.77	0.76	1.11
38. NONFERROUS METALS	0.45	0.46	0.48	0.50	0.51	0.52	3.00
40. FAB. STRUCTURAL METAL PRODUCTS	0.95	0.95	0.98	1.01	1.04	1.05	2.14
41. SCREW MACHINE PROD.&STAMPINGS	0.30	0.31	0.32	0.33	0.33	0.33	2.21
42. OTHER FAB. METAL PRODUCTS	0.57	0.59	0.62	0.64	0.66	0.67	3.32
43. ENGINES & TURBINES	0.41	0.42	0.44	0.45	0.45	0.45	1.77
45. CONSTR. & MINING MACHINERY	0.74	0.79	0.85	0.89	0.92	0.94	4.93
46. MATERIALS HANDLING MACH. & EQ.	0.26	0.28	0.30	0.31	0.33	0.34	4.91
47. METALWORKING MACH. & EQ.	0.67	0.69	0.74	0.77	0.79	0.80	3.77
49. GENERAL INDUSTRY MACHINERY	0.74	0.76	0.80	0.82	0.83	0.84	2.61
50. MISC. NONELECTRICAL MACH.	0.17	0.17	0.18	0.19	0.19	0.19	2.25
51. OFFICE,COMPUTING & ACCT. MACH.	18.34	19.30	20.34	20.93	21.44	22.12	3.82
53. ELECTRICAL MACHINERY	0.85	0.86	0.90	0.92	0.93	0.94	2.06
55. ELECTRIC LIGHTING & WIRING EQ.	0.39	0.40	0.41	0.42	0.42	0.43	1.71
56. RADIO,TV, & COMMUNICATION EQ.	3.24	3.42	3.62	3.78	3.91	4.07	4.66

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
40. COMPUTER PROGRAMMERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
57. ELECTRONIC COMPONENTS & ACCESS.	1.75	1.88	2.03	2.17	2.28	2.38	6.31
58. MISC. ELECTRICAL MACH. & EQ.	0.35	0.37	0.38	0.39	0.39	0.39	2.12
59. MOTOR VEHICLES & EQUIPMENT	1.30	1.35	1.40	1.42	1.44	1.45	2.24
60. AIRCRAFT & PARTS	2.39	2.55	2.69	2.84	2.92	2.98	4.55
61. OTHER TRANSPORTATION EQ.	0.29	0.30	0.31	0.31	0.31	0.32	1.89
62. INSTRUMENTS & SUPPLIES	3.51	3.55	3.68	3.80	3.89	3.94	2.34
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.53	0.54	0.56	0.59	0.61	0.63	3.28
65. TRANSPORTATION & WAREHOUSING	3.38	3.52	3.66	3.81	3.90	3.96	3.22
66. COMMUNICATION EXC. RADIO & TV	4.03	4.10	4.24	4.33	4.47	4.55	2.48
67. RADIO & TV BROADCASTING	0.65	0.68	0.71	0.73	0.74	0.75	2.93
68. UTILITIES	3.62	3.68	3.73	3.79	3.84	3.90	1.50
69. WHOLESALE & RETAIL TRADE	21.83	22.76	23.69	24.53	25.23	25.95	3.52
70. FINANCE & INSURANCE	30.37	31.29	32.34	33.56	34.84	36.08	3.51
72. PERSONAL SERVICES EXC. AUTO.	0.51	0.55	0.59	0.64	0.68	0.73	7.30
73. BUSINESS SERVICES	47.41	51.33	55.48	59.99	64.19	68.01	7.48
77. MISC. SERVICES	36.12	37.75	39.47	41.48	43.64	45.95	4.93
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	1.99	2.08	2.19	2.29	2.38	2.47	4.43
82. GOVERNMENT INDUSTRY	65.96	68.56	71.91	75.80	79.73	83.65	4.86
TOTAL, ALL INDUSTRIES	273.69	286.38	300.65	315.44	329.53	343.30	4.64

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
41. COMPUTER SYSTEMS ANALYSTS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
6. NONFERROUS METAL MINING	0.01	0.01	0.01	0.01	0.01	0.01	10.80
8. CRUDE PETROLEUM & N. GAS	0.13	0.14	0.16	0.18	0.20	0.21	10.52
11. NEW CONSTRUCTION	0.05	0.05	0.06	0.07	0.07	0.08	10.31
13. ORDNANCE & ACCESSORIES	1.42	1.70	1.95	2.21	2.43	2.63	13.03
24. PAPER & ALLIED PRODUCTS	0.01	0.01	0.02	0.02	0.02	0.02	11.51
26. PRINTING & PUBLISHING	0.03	0.03	0.04	0.04	0.04	0.05	8.86
27. CHEMICALS & PRODUCTS	0.09	0.10	0.12	0.13	0.15	0.16	11.86
28. PLASTICS & SYNTHETIC MATLS.	0.02	0.02	0.03	0.03	0.03	0.04	16.10
29. DRUGS,CLEANING & TOILET PREP.	0.01	0.01	0.01	0.01	0.01	0.01	9.11
31. PET REFINING & REL. PROD.	0.07	0.08	0.09	0.11	0.12	0.13	13.63
32. RUBBER & MISC. PLASTICS PROD.	0.02	0.02	0.02	0.03	0.03	0.03	13.52
36. STONE & CLAY PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	7.50
37. PRIMARY FERROUS METALS	0.07	0.08	0.09	0.10	0.11	0.11	11.15
38. NONFERROUS METALS	0.05	0.06	0.07	0.08	0.09	0.10	13.90
40. FAB. STRUCTURAL METAL PRODUCTS	0.03	0.04	0.04	0.05	0.05	0.06	11.20
41. SCREW MACHINE PROD.&STAMPINGS	0.01	0.01	0.01	0.01	0.02	0.02	7.73
42. OTHER FAB. METAL PRODUCTS	0.02	0.02	0.02	0.02	0.03	0.03	10.08
43. ENGINES & TURBINES	0.03	0.03	0.04	0.04	0.04	0.05	13.47
45. CONSTR. & MINING MACHINERY	0.01	0.01	0.01	0.01	0.01	0.01	11.67
46. MATERIALS HANDLING MACH. & EQ.	0.01	0.02	0.02	0.02	0.02	0.03	13.62
47. METALWORKING MACH. & EQ.	0.02	0.02	0.03	0.03	0.03	0.04	15.68
49. GENERAL INDUSTRY MACHINERY	0.02	0.03	0.03	0.03	0.04	0.04	10.06
51. OFFICE,COMPUTING & ACCT. MACH.	0.25	0.29	0.32	0.35	0.36	0.38	8.97
53. ELECTRICAL MACHINERY	0.04	0.04	0.05	0.05	0.06	0.06	12.08
55. ELECTRIC LIGHTING & WIRING EQ.	0.02	0.02	0.02	0.02	0.02	0.03	10.21
56. RADIO,TV, & COMMUNICATION EQ.	2.02	2.46	2.85	3.24	3.56	3.80	13.44
57. ELECTRONIC COMPONENTS & ACCESS.	0.22	0.28	0.33	0.39	0.44	0.47	16.11
58. MISC. ELECTRICAL MACH. & EQ.	0.01	0.01	0.01	0.01	0.01	0.02	16.13
59. MOTOR VEHICLES & EQUIPMENT	0.02	0.02	0.03	0.03	0.04	0.05	17.43
60. AIRCRAFT & PARTS	1.66	2.00	2.33	2.72	3.06	3.29	14.74
61. OTHER TRANSPORTATION EQ.	0.10	0.11	0.11	0.12	0.12	0.13	4.81
62. INSTRUMENTS & SUPPLIES	0.15	0.17	0.19	0.22	0.24	0.26	12.38
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.02	0.03	0.03	0.04	0.04	0.05	13.90
65. TRANSPORTATION & WAREHOUSING	0.15	0.16	0.18	0.19	0.21	0.22	7.94
66. COMMUNICATION EXC. RADIO & TV	0.12	0.13	0.15	0.17	0.19	0.20	11.76
67. RADIO & TV BROADCASTING	0.01	0.01	0.01	0.01	0.01	0.01	11.35
68. UTILITIES	0.08	0.10	0.11	0.12	0.13	0.14	10.53

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
41. COMPUTER SYSTEMS ANALYSTS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
69. WHOLESALE & RETAIL TRADE	0.19	0.23	0.26	0.29	0.33	0.35	12.78
70. FINANCE & INSURANCE	0.22	0.25	0.29	0.33	0.37	0.40	12.64
72. PERSONAL SERVICES EXC. AUTO.	0.01	0.01	0.01	0.02	0.02	0.02	10.88
73. BUSINESS SERVICES	1.73	2.05	2.35	2.71	3.03	3.26	13.59
77. MISC. SERVICES	0.13	0.14	0.15	0.16	0.18	0.19	7.82
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.17	0.18	0.20	0.22	0.24	0.25	8.76
82. GOVERNMENT INDUSTRY	4.46	4.63	4.97	5.37	5.71	6.00	6.10
TOTAL, ALL INDUSTRIES	13.96	15.91	17.90	20.12	22.05	23.54	11.02
TOTAL EMPLOYMENT							
6. NONFERROUS METAL MINING	0.11	0.12	0.12	0.12	0.12	0.12	2.23
8. CRUDE PETROLEUM & N. GAS	1.72	1.83	1.95	2.02	2.11	2.24	5.45
11. NEW CONSTRUCTION	1.27	1.32	1.37	1.44	1.49	1.53	3.78
13. ORDNANCE & ACCESSORIES	2.36	2.55	2.73	2.92	3.09	3.25	6.63
24. PAPER & ALLIED PRODUCTS	0.66	0.72	0.76	0.79	0.83	0.86	5.42
26. PRINTING & PUBLISHING	1.88	1.94	2.01	2.08	2.13	2.19	3.09
27. CHEMICALS & PRODUCTS	1.89	2.01	2.13	2.24	2.33	2.42	5.09
28. PLASTICS & SYNTHETIC MATLS.	0.74	0.82	0.91	1.00	1.08	1.15	9.27
29. DRUGS,CLEANING & TOILET PREP.	2.54	2.70	2.88	3.05	3.19	3.33	5.55
31. PET REFINING & REL. PROD.	1.29	1.40	1.53	1.66	1.79	1.92	8.30
32. RUBBER & MISC. PLASTICS PROD.	0.65	0.70	0.75	0.80	0.84	0.87	5.87
36. STONE & CLAY PRODUCTS	0.25	0.25	0.25	0.26	0.25	0.25	0.31
37. PRIMARY FERROUS METALS	0.94	1.00	1.07	1.12	1.15	1.18	4.58
38. NONFERROUS METALS	0.62	0.67	0.73	0.79	0.83	0.87	7.04
40. FAB. STRUCTURAL METAL PRODUCTS	0.77	0.80	0.85	0.91	0.96	1.00	5.27
41. SCREW MACHINE PROD.&STAMPINGS	0.18	0.19	0.20	0.20	0.20	0.20	2.20
42. OTHER FAB. METAL PRODUCTS	0.38	0.39	0.41	0.42	0.43	0.44	3.35
43. ENGINES & TURBINES	0.31	0.34	0.37	0.40	0.42	0.44	7.22
45. CONSTR. & MINING MACHINERY	0.65	0.72	0.80	0.86	0.91	0.95	7.92
46. MATERIALS HANDLING MACH. & EQ.	0.23	0.25	0.28	0.30	0.32	0.34	7.90
47. METALWORKING MACH. & EQ.	0.35	0.38	0.43	0.48	0.51	0.55	9.76
49. GENERAL INDUSTRY MACHINERY	0.53	0.55	0.60	0.63	0.65	0.67	5.05
51. OFFICE,COMPUTING & ACCT. MACH.	6.55	6.93	7.35	7.59	7.81	8.09	4.31
53. ELECTRICAL MACHINERY	0.72	0.75	0.81	0.85	0.88	0.91	4.84
55. ELECTRIC LIGHTING & WIRING EQ.	0.32	0.33	0.35	0.36	0.38	0.39	3.54
56. RADIO,TV, & COMMUNICATION EQ.	4.79	5.18	5.63	6.01	6.33	6.71	6.99
57. ELECTRONIC COMPONENTS & ACCESS.	1.03	1.12	1.23	1.34	1.43	1.51	8.06
58. MISC. ELECTRICAL MACH. & EQ.	0.27	0.30	0.33	0.35	0.37	0.40	8.24

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
41. COMPUTER SYSTEMS ANALYSTS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
59. MOTOR VEHICLES & EQUIPMENT	1.06	1.11	1.15	1.17	1.18	1.19	2.48
60. AIRCRAFT & PARTS	3.32	3.68	4.00	4.36	4.60	4.82	7.77
61. OTHER TRANSPORTATION EQ.	0.34	0.36	0.38	0.39	0.40	0.41	3.38
62. INSTRUMENTS & SUPPLIES	1.25	1.33	1.44	1.55	1.65	1.73	6.71
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.55	0.59	0.65	0.71	0.77	0.82	8.27
65. TRANSPORTATION & WAREHOUSING	3.47	3.68	3.89	4.12	4.28	4.42	4.92
66. COMMUNICATION EXC. RADIO & TV	4.72	5.10	5.58	5.98	6.47	6.88	7.83
67. RADIO & TV BROADCASTING	0.37	0.40	0.42	0.44	0.45	0.47	4.73
68. UTILITIES	3.93	4.12	4.31	4.49	4.68	4.85	4.33
69. WHOLESALE & RETAIL TRADE	31.66	33.76	35.88	37.85	39.63	41.44	5.53
70. FINANCE & INSURANCE	25.44	26.77	28.19	29.77	31.41	33.01	5.35
72. PERSONAL SERVICES EXC. AUTO.	0.62	0.64	0.67	0.70	0.73	0.76	4.20
73. BUSINESS SERVICES	35.57	38.73	42.06	45.67	49.05	52.14	7.95
77. MISC. SERVICES	20.05	21.17	22.34	23.66	25.08	26.58	5.80
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	2.56	2.72	2.89	3.06	3.22	3.38	5.70
82. GOVERNMENT INDUSTRY	16.49	17.14	17.98	18.95	19.93	20.91	4.86
TOTAL, ALL INDUSTRIES	190.73	203.24	216.62	230.15	242.91	255.31	6.01

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE
BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
42. SOCIAL SCIENT.&OTHER PROFESSIONALS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
1. LIVESTOCK & PRODUCTS	0.04	0.04	0.04	0.04	0.05	0.05	7.43
2. OTHER AGRICULTURAL PRODUCTS	0.02	0.02	0.02	0.02	0.02	0.02	1.37
3. FORESTRY & FISHERY PRODUCTS	0.09	0.09	0.10	0.10	0.11	0.11	5.44
4. AGR.,FORESTRY,&FISHERY SERV.	0.09	0.10	0.10	0.11	0.12	0.12	6.69
5. IRON ORE MINING	0.03	0.03	0.03	0.04	0.04	0.04	8.33
6. NONFERROUS METAL MINING	0.08	0.09	0.10	0.11	0.12	0.13	10.68
7. COAL MINING	0.08	0.09	0.10	0.11	0.12	0.12	8.96
8. CRUDE PETROLEUM & N. GAS	1.11	1.20	1.25	1.33	1.41	1.44	5.26
9. STONE&CLAY MINING & QUARRYING	0.03	0.04	0.04	0.04	0.05	0.05	10.12
10. CHEM&FERTILIZER MIN. MINING	0.01	0.01	0.01	0.01	0.01	0.01	7.98
11. NEW CONSTRUCTION	3.48	3.95	4.25	4.71	5.08	5.34	8.94
13. ORDNANCE & ACCESSORIES	14.39	16.35	17.90	19.43	20.58	21.44	8.30
14. FOOD & KINDRED PRODUCTS	0.13	0.14	0.14	0.15	0.16	0.16	5.38
16. FABRIC,YARN & THREAD MILLS	0.04	0.04	0.05	0.05	0.05	0.05	4.85
17. MISC. TEXTILE GOODS	0.02	0.02	0.02	0.03	0.03	0.03	7.68
18. APPAREL	0.04	0.04	0.04	0.04	0.05	0.05	6.18
19. MISC. FABRICATED TEXTILE PROD.	0.05	0.06	0.06	0.06	0.07	0.07	4.68
20. LUMBER & WOOD PRODUCTS	0.13	0.15	0.16	0.17	0.19	0.20	9.60
21. WOOD CONTAINERS	0.02	0.02	0.02	0.03	0.03	0.03	9.83
22. HOUSEHOLD FURNITURE	0.02	0.02	0.03	0.03	0.03	0.03	3.96
23. OTHER FURNITURE & FIXTURES	0.04	0.04	0.05	0.05	0.05	0.05	4.47
24. PAPER & ALLIED PRODUCTS	0.17	0.19	0.21	0.22	0.23	0.24	6.75
25. PAPERBOARD CONTAINERS & BOXES	0.07	0.08	0.09	0.10	0.11	0.11	8.78
26. PRINTING & PUBLISHING	1.95	2.12	2.28	2.47	2.61	2.70	6.79
27. CHEMICALS & PRODUCTS	0.66	0.73	0.78	0.85	0.91	0.96	7.58
28. PLASTICS & SYNTHETIC MATLS.	0.11	0.12	0.13	0.14	0.16	0.16	8.87
29. DRUGS,CLEANING & TOILET PREP.	0.04	0.04	0.04	0.05	0.05	0.05	4.48
30. PAINTS & ALLIED PRODUCTS	0.06	0.06	0.07	0.08	0.08	0.08	8.19
31. PET REFINING & REL. PROD.	0.32	0.33	0.35	0.38	0.39	0.40	4.98
32. RUBBER & MISC. PLASTICS PROD.	0.26	0.30	0.33	0.37	0.41	0.44	10.68
35. GLASS & GLASS PRODUCTS	0.05	0.06	0.07	0.08	0.08	0.09	10.33
36. STONE & CLAY PRODUCTS	0.17	0.20	0.21	0.23	0.25	0.26	8.06
37. PRIMARY FERROUS METALS	0.49	0.54	0.59	0.64	0.68	0.71	7.66
38. NONFERROUS METALS	0.55	0.63	0.69	0.76	0.82	0.86	9.47
39. METAL CONTAINERS	0.02	0.02	0.02	0.02	0.02	0.02	6.59
40. FAB. STRUCTURAL METAL PRODUCTS	0.65	0.74	0.79	0.85	0.90	0.95	7.73
41. SCREW MACHINE PROD.&STAMPINGS	0.31	0.35	0.38	0.41	0.44	0.45	7.71

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
42. SOCIAL SCIENT.&OTHER PROFESSIONALS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
42. OTHER FAB. METAL PRODUCTS	0.30	0.34	0.38	0.42	0.45	0.48	9.86
43. ENGINES & TURBINES	0.43	0.48	0.52	0.55	0.58	0.60	7.01
44. FARM & GARDEN MACHINERY	0.01	0.02	0.02	0.02	0.02	0.02	8.18
45. CONSTR. & MINING MACHINERY	0.09	0.10	0.11	0.12	0.12	0.13	7.50
46. MATERIALS HANDLING MACH. & EQ.	0.15	0.18	0.19	0.21	0.23	0.24	9.38
47. METALWORKING MACH. & EQ.	0.34	0.39	0.43	0.48	0.52	0.54	9.69
48. SPECIAL INDUSTRY MACHINERY	0.03	0.04	0.04	0.05	0.05	0.06	12.37
49. GENERAL INDUSTRY MACHINERY	0.33	0.37	0.40	0.43	0.46	0.48	7.77
50. MISC. NONELECTRICAL MACH.	0.32	0.34	0.38	0.41	0.44	0.45	7.53
51. OFFICE,COMPUTING & ACCT. MACH.	0.84	0.98	1.07	1.16	1.22	1.26	8.39
52. SERVICE INDUSTRY MACHINES	0.07	0.08	0.09	0.11	0.12	0.13	13.37
53. ELECTRICAL MACHINERY	0.36	0.42	0.45	0.50	0.54	0.56	9.12
54. HOUSEHOLD APPLIANCES	0.01	0.01	0.01	0.01	0.01	0.01	9.50
55. ELECTRIC LIGHTING & WIRING EQ.	0.17	0.20	0.21	0.23	0.25	0.26	8.25
56. RADIO,TV, & COMMUNICATION EQ.	14.64	16.88	18.58	20.19	21.30	21.82	8.30
57. ELECTRONIC COMPONENTS & ACCESS.	2.54	3.03	3.42	3.84	4.20	4.41	11.62
58. MISC. ELECTRICAL MACH. & EQ.	0.08	0.09	0.10	0.11	0.12	0.13	9.57
59. MOTOR VEHICLES & EQUIPMENT	0.28	0.33	0.38	0.45	0.53	0.62	17.45
60. AIRCRAFT & PARTS	18.40	20.82	22.94	25.33	27.09	27.82	8.62
61. OTHER TRANSPORTATION EQ.	1.88	1.98	2.04	2.08	2.15	2.21	3.32
62. INSTRUMENTS & SUPPLIES	1.63	1.84	2.01	2.20	2.35	2.44	8.32
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.22	0.24	0.26	0.28	0.31	0.32	8.56
64. MISC. MANUFACTURING	0.08	0.09	0.10	0.10	0.11	0.11	5.87
65. TRANSPORTATION & WAREHOUSING	1.62	1.73	1.82	1.95	2.04	2.09	5.16
66. COMMUNICATION EXC. RADIO & TV	0.51	0.54	0.57	0.62	0.66	0.67	5.80
67. RADIO & TV BROADCASTING	1.54	1.73	1.88	2.04	2.17	2.26	7.97
68. UTILITIES	0.68	0.75	0.81	0.87	0.92	0.94	6.61
69. WHOLESALE & RETAIL TRADE	3.15	3.56	3.91	4.33	4.68	4.92	9.30
70. FINANCE & INSURANCE	3.09	3.51	3.88	4.32	4.69	4.92	9.75
71. REAL ESTATE & RENTAL	0.33	0.38	0.42	0.46	0.50	0.53	9.62
72. PERSONAL SERVICES EXC. AUTO.	1.60	1.80	1.95	2.13	2.27	2.38	8.21
73. BUSINESS SERVICES	8.61	9.74	10.77	11.96	12.91	13.50	9.42
74. EATING & DRINKING PLACES	0.53	0.61	0.67	0.75	0.81	0.84	9.62
75. AUTOMOBILE REPAIR & SERVICE	0.10	0.11	0.12	0.13	0.14	0.14	7.43
76. AMUSEMENTS	1.17	1.29	1.40	1.54	1.66	1.76	8.43
77. MISC. SERVICES	37.89	38.48	39.62	41.57	43.09	43.70	2.90
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	38.83	39.94	41.63	43.63	44.89	45.59	3.26
82. GOVERNMENT INDUSTRY	96.97	95.40	97.38	100.18	101.90	102.67	1.15
TOTAL, ALL INDUSTRIES	265.68	277.85	292.53	310.10	322.97	330.07	4.44

TOTAL EMPLOYMENT

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
42. SOCIAL SCIENT.&OTHER PROFESSIONALS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
1. LIVESTOCK & PRODUCTS	5.70	5.98	6.14	6.32	6.59	6.89	3.87
2. OTHER AGRICULTURAL PRODUCTS	14.82	14.69	14.56	14.31	14.08	13.86	-1.34
3. FORESTRY & FISHERY PRODUCTS	3.39	3.55	3.76	3.90	3.89	3.83	2.50
4. AGR.,FORESTRY,&FISHERY SERV.	4.82	4.94	4.98	5.09	5.14	5.21	1.60
5. IRON ORE MINING	0.51	0.55	0.59	0.59	0.58	0.57	2.14
6. NONFERROUS METAL MINING	1.33	1.40	1.45	1.49	1.47	1.48	2.12
7. COAL MINING	2.83	2.97	3.08	3.15	3.26	3.32	3.27
8. CRUDE PETROLEUM & N. GAS	15.07	15.21	15.33	15.19	15.13	15.39	0.43
9. STONE&CLAY MINING & QUARRYING	1.02	1.04	1.08	1.12	1.15	1.16	2.71
10. CHEM&FERTILIZER MIN. MINING	0.49	0.50	0.52	0.53	0.54	0.54	2.07
11. NEW CONSTRUCTION	92.61	94.83	97.01	100.36	103.05	104.75	2.49
13. ORDNANCE & ACCESSORIES	23.81	24.46	25.00	25.68	26.13	26.51	2.17
14. FOOD & KINDRED PRODUCTS	18.80	19.11	19.28	19.26	19.13	19.03	0.24
16. FABRIC,YARN & THREAD MILLS	3.35	3.44	3.52	3.58	3.61	3.60	1.46
17. MISC. TEXTILE GOODS	1.43	1.49	1.56	1.62	1.66	1.68	3.26
18. APPAREL	9.80	9.89	10.13	10.33	10.35	10.37	1.14
19. MISC. FABRICATED TEXTILE PROD.	1.85	1.90	1.95	1.99	2.01	2.03	1.86
20. LUMBER & WOOD PRODUCTS	6.20	6.76	7.06	7.37	7.48	7.46	3.75
21. WOOD CONTAINERS	0.33	0.33	0.33	0.34	0.35	0.35	1.17
22. HOUSEHOLD FURNITURE	3.76	3.98	4.12	4.27	4.37	4.42	3.29
23. OTHER FURNITURE & FIXTURES	2.69	2.71	2.79	2.87	2.92	2.98	2.05
24. PAPER & ALLIED PRODUCTS	9.31	9.60	9.71	9.75	9.75	9.74	0.92
25. PAPERBOARD CONTAINERS & BOXES	3.37	3.46	3.54	3.61	3.65	3.67	1.72
26. PRINTING & PUBLISHING	123.83	125.14	126.89	128.61	129.86	131.02	1.14
27. CHEMICALS & PRODUCTS	13.78	14.03	14.24	14.37	14.45	14.52	1.06
28. PLASTICS & SYNTHETIC MATLS.	4.40	4.57	4.74	4.87	4.94	4.97	2.47
29. DRUGS,CLEANING & TOILET PREP.	10.95	11.06	11.27	11.44	11.48	11.54	1.07
30. PAINTS & ALLIED PRODUCTS	1.09	1.14	1.18	1.22	1.24	1.26	2.97
31. PET REFINING & REL. PROD.	5.89	5.87	5.89	5.93	5.92	5.90	0.05
32. RUBBER & MISC. PLASTICS PROD.	9.65	10.01	10.47	10.84	11.16	11.30	3.22
35. GLASS & GLASS PRODUCTS	2.46	2.53	2.60	2.64	2.65	2.65	1.54
36. STONE & CLAY PRODUCTS	5.38	5.47	5.55	5.68	5.69	5.61	0.84
37. PRIMARY FERROUS METALS	6.86	7.06	7.27	7.35	7.36	7.32	1.30
38. NONFERROUS METALS	6.46	6.71	6.99	7.21	7.33	7.45	2.87
39. METAL CONTAINERS	1.14	1.12	1.12	1.14	1.15	1.16	0.34
40. FAB. STRUCTURAL METAL PRODUCTS	14.65	14.70	15.07	15.59	15.93	16.16	1.99

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
42. SOCIAL SCIENT.&OTHER PROFESSIONALS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
41. SCREW MACHINE PROD.&STAMPINGS	5.10	5.36	5.54	5.63	5.66	5.68	2.18
42. OTHER FAB. METAL PRODUCTS	6.52	6.73	7.04	7.27	7.44	7.62	3.16
43. ENGINES & TURBINES	5.11	5.24	5.40	5.42	5.41	5.40	1.11
44. FARM & GARDEN MACHINERY	4.21	4.33	4.55	4.62	4.67	4.73	2.34
45. CONSTR. & MINING MACHINERY	7.58	8.03	8.47	8.80	9.05	9.17	3.89
46. MATERIALS HANDLING MACH. & EQ.	2.71	2.80	2.98	3.11	3.20	3.28	3.87
47. METALWORKING MACH. & EQ.	6.65	6.94	7.38	7.70	7.94	8.12	4.08
48. SPECIAL INDUSTRY MACHINERY	4.52	4.63	4.87	5.11	5.25	5.37	3.50
49. GENERAL INDUSTRY MACHINERY	7.52	7.73	8.11	8.35	8.51	8.66	2.87
50. MISC. NONELECTRICAL MACH.	2.75	2.82	2.94	3.01	3.04	3.07	2.22
51. OFFICE,COMPUTING & ACCT. MACH.	22.41	23.57	24.82	25.53	26.12	26.94	3.75
52. SERVICE INDUSTRY MACHINES	3.98	4.13	4.33	4.40	4.41	4.41	2.10
53. ELECTRICAL MACHINERY	7.29	7.42	7.75	7.93	8.02	8.08	2.07
54. HOUSEHOLD APPLIANCES	2.45	2.52	2.59	2.68	2.73	2.77	2.48
55. ELECTRIC LIGHTING & WIRING EQ.	3.66	3.69	3.79	3.88	3.94	3.98	1.70
56. RADIO,TV, & COMMUNICATION EQ.	34.67	35.55	36.74	37.45	37.85	38.55	2.14
57. ELECTRONIC COMPONENTS & ACCESS.	11.61	12.14	12.77	13.32	13.73	14.05	3.89
58. MISC. ELECTRICAL MACH. & EQ.	3.03	3.13	3.25	3.29	3.33	3.36	2.12
59. MOTOR VEHICLES & EQUIPMENT	14.25	14.94	15.49	15.78	16.00	16.13	2.50
60. AIRCRAFT & PARTS	36.85	38.33	39.39	40.64	40.75	40.74	2.03
61. OTHER TRANSPORTATION EQ.	6.49	6.68	6.91	7.06	7.07	7.13	1.91
62. INSTRUMENTS & SUPPLIES	14.03	14.29	14.87	15.46	15.88	16.15	2.85
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	4.97	5.04	5.26	5.49	5.67	5.82	3.19
64. MISC. MANUFACTURING	7.60	7.71	7.95	8.16	8.28	8.33	1.84
65. TRANSPORTATION & WAREHOUSING	38.21	39.37	40.48	41.77	42.33	42.64	2.21
66. COMMUNICATION EXC. RADIO & TV	20.44	20.72	21.34	21.69	22.32	22.64	2.07
67. RADIO & TV BROADCASTING	77.77	80.00	81.99	82.96	83.47	83.98	1.55
68. UTILITIES	31.80	32.03	32.23	32.42	32.64	32.81	0.63
69. WHOLESALE & RETAIL TRADE	515.37	530.31	545.23	557.62	567.02	576.85	2.28
70. FINANCE & INSURANCE	361.01	368.51	377.45	388.49	400.14	411.30	2.64
71. REAL ESTATE & RENTAL	12.10	12.52	12.99	13.43	13.81	14.14	3.17
72. PERSONAL SERVICES EXC. AUTO.	87.32	88.54	90.16	91.82	93.48	94.93	1.69
73. BUSINESS SERVICES	177.37	184.49	192.31	201.29	209.13	215.69	3.99
74. EATING & DRINKING PLACES	34.36	34.94	35.47	35.73	35.93	36.01	0.94
75. AUTOMOBILE REPAIR & SERVICE	6.78	6.92	7.00	7.04	7.09	7.16	1.11
76. AMUSEMENTS	119.98	121.65	125.04	127.99	131.17	134.07	2.25
77. MISC. SERVICES	5,869.48	5,876.69	5,901.00	5,967.38	6,054.20	6,157.84	0.96
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	997.38	1,004.04	1,014.52	1,030.06	1,046.73	1,064.77	1.32
82. GOVERNMENT INDUSTRY	991.78	991.07	1,001.61	1,019.32	1,037.11	1,054.84	1.24

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
42. SOCIAL SCIENT.&OTHER PROFESSIONALS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
TOTAL, ALL INDUSTRIES	10,004.77	10,071.57	10,176.62	10,332.50	10,499.78	10,680.68	1.32

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
43. ECONOMISTS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
8. CRUDE PETROLEUM & N. GAS	0.04	0.04	0.04	0.04	0.05	0.05	4.52
11. NEW CONSTRUCTION	0.01	0.01	0.01	0.01	0.01	0.01	8.59
56. RADIO,TV, & COMMUNICATION EQ.	0.02	0.02	0.03	0.03	0.03	0.03	8.44
60. AIRCRAFT & PARTS	0.31	0.36	0.41	0.47	0.52	0.55	12.26
65. TRANSPORTATION & WAREHOUSING	0.03	0.03	0.04	0.04	0.04	0.04	6.69
68. UTILITIES	0.05	0.06	0.07	0.07	0.08	0.08	9.57
70. FINANCE & INSURANCE	0.01	0.01	0.01	0.02	0.02	0.02	11.73
73. BUSINESS SERVICES	0.10	0.12	0.13	0.15	0.16	0.17	10.44
77. MISC. SERVICES	0.03	0.03	0.03	0.03	0.03	0.03	4.51
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.20	0.20	0.22	0.23	0.25	0.26	5.55
82. GOVERNMENT INDUSTRY	0.37	0.38	0.40	0.43	0.45	0.47	4.63
TOTAL, ALL INDUSTRIES	1.21	1.32	1.44	1.58	1.70	1.78	7.94
TOTAL EMPLOYMENT							
8. CRUDE PETROLEUM & N. GAS	0.50	0.50	0.50	0.49	0.49	0.49	-0.27
11. NEW CONSTRUCTION	0.21	0.21	0.22	0.22	0.23	0.23	2.17
56. RADIO,TV, & COMMUNICATION EQ.	0.05	0.05	0.05	0.06	0.06	0.06	2.27
60. AIRCRAFT & PARTS	0.62	0.67	0.71	0.75	0.78	0.81	5.44
65. TRANSPORTATION & WAREHOUSING	0.72	0.76	0.79	0.83	0.85	0.87	3.71
68. UTILITIES	2.46	2.55	2.64	2.73	2.82	2.91	3.42
70. FINANCE & INSURANCE	1.33	1.38	1.45	1.51	1.59	1.66	4.49
73. BUSINESS SERVICES	2.11	2.21	2.33	2.46	2.58	2.68	4.96
77. MISC. SERVICES	3.93	4.00	4.08	4.19	4.31	4.45	2.55
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	2.12	2.19	2.27	2.37	2.47	2.56	3.92
82. GOVERNMENT INDUSTRY	15.43	15.96	16.68	17.51	18.36	19.19	4.46
TOTAL, ALL INDUSTRIES	31.28	32.36	33.64	35.11	36.52	37.91	3.92

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE
BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
44. SOCIAL SCIENTISTS NEC
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
38. NONFERROUS METALS	0.01	0.01	0.01	0.01	0.01	0.01	9.53
56. RADIO, TV, & COMMUNICATION EQ.	0.72	0.83	0.92	1.00	1.05	1.08	8.25
70. FINANCE & INSURANCE	0.11	0.12	0.14	0.16	0.17	0.18	11.04
71. REAL ESTATE & RENTAL	0.01	0.01	0.01	0.01	0.01	0.01	8.56
73. BUSINESS SERVICES	0.61	0.67	0.73	0.80	0.84	0.87	7.35
77. MISC. SERVICES	0.47	0.48	0.50	0.54	0.56	0.58	4.35
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	1.90	1.91	1.98	2.07	2.13	2.17	2.74
82. GOVERNMENT INDUSTRY	5.51	5.46	5.62	5.83	5.98	6.08	1.98
TOTAL, ALL INDUSTRIES	9.34	9.51	9.92	10.42	10.78	11.00	3.31
TOTAL EMPLOYMENT							
38. NONFERROUS METALS	0.07	0.07	0.07	0.08	0.08	0.08	2.93
56. RADIO, TV, & COMMUNICATION EQ.	1.71	1.76	1.81	1.85	1.87	1.90	2.09
70. FINANCE & INSURANCE	12.54	12.97	13.45	14.01	14.59	15.15	3.85
71. REAL ESTATE & RENTAL	0.35	0.36	0.37	0.38	0.39	0.39	2.17
73. BUSINESS SERVICES	12.52	12.75	13.03	13.38	13.66	13.84	2.03
77. MISC. SERVICES	72.46	73.63	75.01	76.93	79.11	81.54	2.39
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	21.87	22.19	22.64	23.24	23.87	24.51	2.31
82. GOVERNMENT INDUSTRY	52.34	52.65	53.56	54.88	56.20	57.46	1.88
TOTAL, ALL INDUSTRIES	174.41	176.95	180.53	185.33	190.36	195.48	2.31

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL •
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
45. TEACHERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	0.23	0.26	0.28	0.30	0.32	0.33	8.10
43. ENGINES & TURBINES	0.01	0.01	0.01	0.01	0.01	0.01	7.73
51. OFFICE,COMPUTING & ACCT. MACH.	0.04	0.05	0.05	0.06	0.06	0.06	7.32
56. RADIO,TV, & COMMUNICATION EQ.	0.38	0.44	0.48	0.53	0.55	0.57	8.28
57. ELECTRONIC COMPONENTS & ACCESS.	0.04	0.04	0.05	0.05	0.06	0.06	11.35
60. AIRCRAFT & PARTS	0.21	0.23	0.26	0.28	0.30	0.31	8.59
61. OTHER TRANSPORTATION EQ.	0.05	0.05	0.05	0.06	0.06	0.06	3.38
62. INSTRUMENTS & SUPPLIES	0.01	0.01	0.01	0.01	0.01	0.01	8.43
65. TRANSPORTATION & WAREHOUSING	0.19	0.20	0.21	0.23	0.24	0.25	5.41
69. WHOLESALE & RETAIL TRADE	0.02	0.02	0.02	0.03	0.03	0.03	9.67
70. FINANCE & INSURANCE	0.01	0.01	0.01	0.01	0.01	0.01	9.37
72. PERSONAL SERVICES EXC. AUTO.	0.01	0.01	0.01	0.01	0.01	0.01	8.77
73. BUSINESS SERVICES	0.08	0.09	0.10	0.12	0.13	0.14	12.34
76. AMUSEMENTS	0.08	0.09	0.10	0.11	0.11	0.12	7.41
77. MISC. SERVICES	25.71	25.98	26.61	27.78	28.66	28.92	2.38
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	2.04	2.10	2.18	2.27	2.31	2.32	2.68
82. GOVERNMENT INDUSTRY	20.08	19.64	19.79	20.07	20.09	19.93	-0.15
TOTAL, ALL INDUSTRIES	49.22	49.29	50.29	51.99	53.04	53.23	1.58
TOTAL EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	0.37	0.38	0.39	0.40	0.41	0.41	1.98
43. ENGINES & TURBINES	0.10	0.10	0.11	0.11	0.11	0.11	1.79
51. OFFICE,COMPUTING & ACCT. MACH.	1.10	1.15	1.19	1.22	1.23	1.26	2.73
56. RADIO,TV, & COMMUNICATION EQ.	0.90	0.93	0.96	0.97	0.98	1.00	2.12
57. ELECTRONIC COMPONENTS & ACCESS.	0.17	0.17	0.18	0.19	0.20	0.20	3.63
60. AIRCRAFT & PARTS	0.41	0.43	0.44	0.46	0.46	0.46	1.99
61. OTHER TRANSPORTATION EQ.	0.17	0.18	0.18	0.19	0.19	0.19	1.97
62. INSTRUMENTS & SUPPLIES	0.08	0.08	0.08	0.09	0.09	0.09	2.96
65. TRANSPORTATION & WAREHOUSING	4.45	4.60	4.74	4.90	4.98	5.02	2.46
69. WHOLESALE & RETAIL TRADE	3.03	3.13	3.23	3.31	3.38	3.45	2.63
70. FINANCE & INSURANCE	0.95	0.96	0.98	1.01	1.03	1.06	2.29
72. PERSONAL SERVICES EXC. AUTO.	0.35	0.36	0.37	0.38	0.38	0.39	2.21
73. BUSINESS SERVICES	1.63	1.75	1.87	2.01	2.14	2.26	6.76
76. AMUSEMENTS	8.52	8.55	8.70	8.83	8.96	9.08	1.29
77. MISC. SERVICES	3,983.04	3,967.41	3,963.56	3,987.97	4,025.84	4,074.59	0.46
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	131.60	131.12	131.04	131.89	133.17	134.79	0.48

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
45. TEACHERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
82. GOVERNMENT INDUSTRY	56.78	56.77	57.44	58.64	59.82	60.69	1.34
TOTAL, ALL INDUSTRIES	4,195.92	4,180.37	4,177.83	4,204.96	4,245.80	4,297.50	0.48

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
46. COLLEGE&UNIVERSITY TEACHERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
77. MISC. SERVICES	3.05	3.03	3.06	3.15	3.20	3.18	0.83
TOTAL, ALL INDUSTRIES	3.05	3.03	3.06	3.15	3.20	3.18	0.83
TOTAL EMPLOYMENT							
77. MISC. SERVICES	472.26	463.43	456.05	451.92	449.26	447.69	-1.06
TOTAL, ALL INDUSTRIES	472.98	464.14	456.75	452.63	449.96	448.40	-1.06

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
47. ELEM&SECOND SCHOOL TEACHERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
77. MISC. SERVICES	15.88	15.32	14.95	14.84	14.52	13.86	-2.69
TOTAL, ALL INDUSTRIES	15.88	15.32	14.95	14.84	14.52	13.86	-2.69
TOTAL EMPLOYMENT							
77. MISC. SERVICES	2,460.72	2,339.87	2,227.15	2,130.38	2,039.71	1,952.82	-4.52
TOTAL, ALL INDUSTRIES	2,462.65	2,341.70	2,228.89	2,132.04	2,041.30	1,954.35	-4.52

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
48. VOCATIONAL EDUCATION TEACHERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
65. TRANSPORTATION & WAREHOUSING	0.16	0.17	0.18	0.19	0.20	0.21	5.63
77. MISC. SERVICES	0.17	0.17	0.18	0.19	0.20	0.21	4.35
82. GOVERNMENT INDUSTRY	17.19	16.82	16.91	17.12	17.09	16.91	-0.33
TOTAL, ALL INDUSTRIES	17.52	17.16	17.27	17.51	17.50	17.33	-0.22
TOTAL EMPLOYMENT							
65. TRANSPORTATION & WAREHOUSING	3.76	3.89	4.02	4.17	4.24	4.29	2.68
77. MISC. SERVICES	25.87	26.29	26.78	27.46	28.24	29.11	2.39
82. GOVERNMENT INDUSTRY	8.77	8.56	8.59	8.69	8.66	8.55	-0.50
TOTAL, ALL INDUSTRIES	38.40	38.74	39.39	40.32	41.14	41.95	1.79

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
49. ALL OTHER TEACHERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	0.23	0.26	0.28	0.30	0.32	0.33	8.10
43. ENGINES & TURBINES	0.01	0.01	0.01	0.01	0.01	0.01	7.73
51. OFFICE,COMPUTING & ACCT. MACH.	0.04	0.05	0.05	0.06	0.06	0.06	7.32
56. RADIO,TV, & COMMUNICATION EQ.	0.38	0.44	0.48	0.53	0.55	0.57	8.28
57. ELECTRONIC COMPONENTS & ACCESS.	0.04	0.04	0.05	0.05	0.06	0.06	11.35
60. AIRCRAFT & PARTS	0.21	0.23	0.26	0.28	0.30	0.31	8.59
61. OTHER TRANSPORTATION EQ.	0.05	0.05	0.05	0.06	0.06	0.06	3.38
62. INSTRUMENTS & SUPPLIES	0.01	0.01	0.01	0.01	0.01	0.01	8.43
65. TRANSPORTATION & WAREHOUSING	0.03	0.03	0.03	0.03	0.04	0.04	4.15
69. WHOLESALE & RETAIL TRADE	0.02	0.02	0.02	0.03	0.03	0.03	9.67
70. FINANCE & INSURANCE	0.01	0.01	0.01	0.01	0.01	0.01	9.37
72. PERSONAL SERVICES EXC. AUTO.	0.01	0.01	0.01	0.01	0.01	0.01	8.77
73. BUSINESS SERVICES	0.08	0.09	0.10	0.12	0.13	0.14	12.34
76. AMUSEMENTS	0.08	0.09	0.10	0.11	0.11	0.12	7.41
77. MISC. SERVICES	5.16	5.26	5.44	5.72	5.95	6.06	3.25
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	2.23	2.32	2.42	2.54	2.61	2.65	3.48
82. GOVERNMENT INDUSTRY	2.88	2.82	2.88	2.95	3.00	3.02	0.91
TOTAL, ALL INDUSTRIES	11.51	11.81	12.27	12.89	13.34	13.57	3.33
TOTAL EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	0.37	0.38	0.39	0.40	0.41	0.41	1.98
43. ENGINES & TURBINES	0.10	0.10	0.11	0.11	0.11	0.11	1.79
51. OFFICE,COMPUTING & ACCT. MACH.	1.10	1.15	1.19	1.22	1.23	1.26	2.73
56. RADIO,TV, & COMMUNICATION EQ.	0.90	0.93	0.96	0.97	0.98	1.00	2.12
57. ELECTRONIC COMPONENTS & ACCESS.	0.17	0.17	0.18	0.19	0.20	0.20	3.63
60. AIRCRAFT & PARTS	0.41	0.43	0.44	0.46	0.46	0.46	1.99
61. OTHER TRANSPORTATION EQ.	0.17	0.18	0.18	0.19	0.19	0.19	1.97
62. INSTRUMENTS & SUPPLIES	0.08	0.08	0.08	0.09	0.09	0.09	2.96
65. TRANSPORTATION & WAREHOUSING	0.69	0.70	0.71	0.73	0.73	0.73	1.24
69. WHOLESALE & RETAIL TRADE	3.03	3.13	3.23	3.31	3.38	3.45	2.63
70. FINANCE & INSURANCE	0.95	0.96	0.98	1.01	1.03	1.06	2.29
72. PERSONAL SERVICES EXC. AUTO.	0.35	0.36	0.37	0.38	0.38	0.39	2.21
73. BUSINESS SERVICES	1.63	1.75	1.87	2.01	2.14	2.26	6.76
76. AMUSEMENTS	8.52	8.55	8.70	8.83	8.96	9.08	1.29
77. MISC. SERVICES	799.96	803.77	809.89	821.79	836.52	853.63	1.31
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	132.72	133.35	134.43	136.42	138.85	141.64	1.31

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
49. ALL OTHER TEACHERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
82. GOVERNMENT INDUSTRY	28.17	28.00	28.14	28.50	28.85	29.19	0.71
TOTAL, ALL INDUSTRIES	981.58	986.30	994.24	1,009.00	1,026.95	1,047.60	1.31

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE
BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
50. WRITERS, ARTISTS & ENTERTAINERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
1. LIVESTOCK & PRODUCTS	0.03	0.03	0.03	0.03	0.04	0.04	8.86
2. OTHER AGRICULTURAL PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	-2.31
4. AGR.,FORESTRY,&FISHERY SERV.	0.03	0.04	0.04	0.04	0.05	0.05	6.86
8. CRUDE PETROLEUM & N. GAS	0.04	0.04	0.04	0.05	0.05	0.05	4.58
11. NEW CONSTRUCTION	0.09	0.10	0.11	0.12	0.13	0.14	8.59
13. ORDNANCE & ACCESSORIES	2.00	2.26	2.47	2.68	2.83	2.94	8.10
14. FOOD & KINDRED PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	5.04
16. FABRIC,YARN & THREAD MILLS	0.01	0.01	0.01	0.01	0.01	0.01	5.14
18. APPAREL	0.02	0.02	0.02	0.02	0.02	0.02	5.81
19. MISC. FABRICATED TEXTILE PROD.	0.02	0.02	0.02	0.02	0.02	0.02	4.69
20. LUMBER & WOOD PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	8.83
24. PAPER & ALLIED PRODUCTS	0.02	0.03	0.03	0.03	0.03	0.03	7.05
25. PAPERBOARD CONTAINERS & BOXES	0.02	0.02	0.03	0.03	0.03	0.03	8.78
26. PRINTING & PUBLISHING	1.68	1.83	1.98	2.14	2.27	2.34	6.90
27. CHEMICALS & PRODUCTS	0.05	0.06	0.06	0.06	0.07	0.07	7.50
28. PLASTICS & SYNTHETIC MATLS.	0.01	0.01	0.01	0.01	0.01	0.01	8.70
29. DRUGS,CLEANING & TOILET PREP.	0.01	0.01	0.01	0.01	0.01	0.01	4.21
30. PAINTS & ALLIED PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	8.25
31. PET REFINING & REL. PROD.	0.03	0.03	0.03	0.03	0.04	0.04	5.27
32. RUBBER & MISC. PLASTICS PROD.	0.02	0.03	0.03	0.04	0.04	0.04	10.29
35. GLASS & GLASS PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.02	12.09
36. STONE & CLAY PRODUCTS	0.01	0.01	0.01	0.01	0.02	0.02	8.49
37. PRIMARY FERROUS METALS	0.02	0.03	0.03	0.03	0.03	0.03	7.21
38. NONFERROUS METALS	0.02	0.02	0.03	0.03	0.03	0.03	9.64
40. FAB. STRUCTURAL METAL PRODUCTS	0.05	0.05	0.06	0.06	0.06	0.07	7.74
41. SCREW MACHINE PROD.&STAMPINGS	0.03	0.03	0.04	0.04	0.04	0.04	7.70
42. OTHER FAB. METAL PRODUCTS	0.03	0.03	0.04	0.04	0.05	0.05	10.07
43. ENGINES & TURBINES	0.09	0.11	0.12	0.12	0.13	0.14	7.71
45. CONSTR. & MINING MACHINERY	0.02	0.03	0.03	0.03	0.03	0.03	7.24
46. MATERIALS HANDLING MACH. & EQ.	0.04	0.05	0.05	0.06	0.06	0.06	9.12
47. METALWORKING MACH. & EQ.	0.08	0.09	0.10	0.11	0.12	0.12	9.35
48. SPECIAL INDUSTRY MACHINERY	0.01	0.01	0.01	0.01	0.01	0.01	12.07
49. GENERAL INDUSTRY MACHINERY	0.06	0.07	0.08	0.08	0.09	0.09	7.51
50. MISC. NONELECTRICAL MACH.	0.02	0.02	0.03	0.03	0.03	0.03	7.53
51. OFFICE,COMPUTING & ACCT. MACH.	0.18	0.21	0.23	0.24	0.25	0.26	7.32
52. SERVICE INDUSTRY MACHINES	0.01	0.01	0.02	0.02	0.02	0.02	13.34
53. ELECTRICAL MACHINERY	0.07	0.08	0.09	0.10	0.10	0.11	9.08

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
50. WRITERS, ARTISTS & ENTERTAINERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
55. ELECTRIC LIGHTING & WIRING EQ.	0.05	0.05	0.06	0.06	0.07	0.07	8.25
56. RADIO,TV, & COMMUNICATION EQ.	3.75	4.32	4.75	5.16	5.44	5.57	8.23
57. ELECTRONIC COMPONENTS & ACCESS.	0.49	0.59	0.66	0.74	0.81	0.85	11.37
58. MISC. ELECTRICAL MACH. & EQ.	0.02	0.03	0.03	0.03	0.03	0.03	9.56
59. MOTOR VEHICLES & EQUIPMENT	0.06	0.08	0.09	0.10	0.12	0.14	17.14
60. AIRCRAFT & PARTS	3.34	3.78	4.16	4.59	4.91	5.04	8.59
61. OTHER TRANSPORTATION EQ.	0.19	0.20	0.21	0.21	0.22	0.23	3.21
62. INSTRUMENTS & SUPPLIES	0.36	0.41	0.45	0.49	0.52	0.53	8.04
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.04	0.04	0.05	0.05	0.06	0.06	8.58
64. MISC. MANUFACTURING	0.03	0.03	0.04	0.04	0.04	0.04	5.31
65. TRANSPORTATION & WAREHOUSING	0.10	0.10	0.11	0.12	0.12	0.12	4.49
66. COMMUNICATION EXC. RADIO & TV	0.07	0.08	0.08	0.09	0.10	0.10	5.53
67. RADIO & TV BROADCASTING	1.41	1.58	1.71	1.86	1.98	2.06	7.94
68. UTILITIES	0.12	0.13	0.14	0.15	0.16	0.16	5.96
69. WHOLESALE & RETAIL TRADE	0.54	0.60	0.65	0.71	0.75	0.78	7.71
70. FINANCE & INSURANCE	0.11	0.12	0.14	0.15	0.16	0.17	9.97
71. REAL ESTATE & RENTAL	0.03	0.03	0.03	0.04	0.04	0.04	8.46
72. PERSONAL SERVICES EXC. AUTO.	0.48	0.53	0.57	0.61	0.64	0.66	6.38
73. BUSINESS SERVICES	2.76	3.07	3.33	3.64	3.87	3.99	7.68
74. EATING & DRINKING PLACES	0.39	0.45	0.50	0.55	0.59	0.62	9.57
76. AMUSEMENTS	0.99	1.09	1.18	1.30	1.40	1.48	8.50
77. MISC. SERVICES	0.71	0.73	0.75	0.79	0.83	0.84	3.37
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	11.47	12.09	12.74	13.46	13.90	14.13	4.26
82. GOVERNMENT INDUSTRY	8.76	8.60	8.77	9.03	9.19	9.26	1.11
TOTAL, ALL INDUSTRIES	41.16	44.17	47.11	50.39	52.73	54.04	5.60

TOTAL EMPLOYMENT

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
1. LIVESTOCK & PRODUCTS	4.28	4.55	4.73	4.93	5.21	5.53	5.24
2. OTHER AGRICULTURAL PRODUCTS	4.41	4.23	4.05	3.84	3.63	3.43	-4.91
4. AGR.,FORESTRY,&FISHERY SERV.	1.88	1.93	1.95	2.00	2.02	2.05	1.76
8. CRUDE PETROLEUM & N. GAS	0.54	0.54	0.54	0.53	0.52	0.53	-0.23
11. NEW CONSTRUCTION	2.38	2.43	2.48	2.55	2.62	2.65	2.17
13. ORDNANCE & ACCESSORIES	3.30	3.38	3.45	3.54	3.59	3.64	1.98
14. FOOD & KINDRED PRODUCTS	0.78	0.79	0.79	0.79	0.78	0.78	-0.07
16. FABRIC,YARN & THREAD MILLS	0.56	0.58	0.59	0.60	0.61	0.61	1.75
18. APPAREL	4.41	4.43	4.52	4.60	4.59	4.58	0.78
19. MISC. FABRICATED TEXTILE PROD.	0.66	0.68	0.70	0.71	0.72	0.72	1.86
20. LUMBER & WOOD PRODUCTS	0.30	0.32	0.34	0.35	0.35	0.35	3.02

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
50. WRITERS, ARTISTS & ENTERTAINERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
24. PAPER & ALLIED PRODUCTS	1.32	1.36	1.38	1.39	1.40	1.40	1.20
25. PAPERBOARD CONTAINERS & BOXES	0.96	0.98	1.01	1.03	1.04	1.04	1.72
26. PRINTING & PUBLISHING	106.92	108.16	109.80	111.39	112.59	113.70	1.24
27. CHEMICALS & PRODUCTS	1.05	1.07	1.08	1.09	1.10	1.10	0.99
28. PLASTICS & SYNTHETIC MATLS.	0.25	0.26	0.27	0.28	0.28	0.28	2.30
29. DRUGS,CLEANING & TOILET PREP.	1.94	1.95	1.98	2.01	2.01	2.02	0.80
30. PAINTS & ALLIED PRODUCTS	0.11	0.11	0.12	0.12	0.12	0.13	3.02
31. PET REFINING & REL. PROD.	0.52	0.52	0.53	0.53	0.53	0.53	0.33
32. RUBBER & MISC. PLASTICS PROD.	0.91	0.95	0.99	1.02	1.04	1.05	2.87
35. GLASS & GLASS PRODUCTS	0.39	0.41	0.43	0.44	0.45	0.46	3.16
36. STONE & CLAY PRODUCTS	0.34	0.35	0.36	0.37	0.37	0.36	1.24
37. PRIMARY FERROUS METALS	0.32	0.33	0.33	0.34	0.34	0.33	0.88
38. NONFERROUS METALS	0.25	0.26	0.27	0.28	0.29	0.29	3.03
40. FAB. STRUCTURAL METAL PRODUCTS	1.04	1.05	1.07	1.11	1.13	1.15	2.00
41. SCREW MACHINE PROD.&STAMPINGS	0.48	0.50	0.52	0.53	0.53	0.53	2.17
42. OTHER FAB. METAL PRODUCTS	0.66	0.68	0.72	0.74	0.76	0.78	3.34
43. ENGINES & TURBINES	1.12	1.16	1.20	1.21	1.22	1.22	1.77
45. CONSTR. & MINING MACHINERY	2.01	2.12	2.23	2.31	2.38	2.40	3.64
46. MATERIALS HANDLING MACH. & EQ.	0.72	0.74	0.79	0.82	0.84	0.86	3.62
47. METALWORKING MACH. & EQ.	1.52	1.58	1.67	1.74	1.79	1.83	3.75
48. SPECIAL INDUSTRY MACHINERY	0.94	0.96	1.01	1.06	1.08	1.11	3.22
49. GENERAL INDUSTRY MACHINERY	1.45	1.48	1.55	1.59	1.62	1.65	2.62
50. MISC. NONELECTRICAL MACH.	0.19	0.19	0.20	0.20	0.21	0.21	2.22
51. OFFICE,COMPUTING & ACCT. MACH.	4.84	5.03	5.24	5.34	5.41	5.53	2.72
52. SERVICE INDUSTRY MACHINES	0.70	0.73	0.76	0.77	0.77	0.77	2.08
53. ELECTRICAL MACHINERY	1.41	1.43	1.49	1.53	1.54	1.55	2.03
55. ELECTRIC LIGHTING & WIRING EQ.	0.98	0.99	1.01	1.04	1.05	1.07	1.70
56. RADIO,TV, & COMMUNICATION EQ.	8.88	9.10	9.40	9.57	9.67	9.84	2.07
57. ELECTRONIC COMPONENTS & ACCESS.	2.26	2.36	2.47	2.57	2.65	2.70	3.65
58. MISC. ELECTRICAL MACH. & EQ.	0.80	0.83	0.87	0.88	0.89	0.89	2.11
59. MOTOR VEHICLES & EQUIPMENT	3.30	3.45	3.57	3.63	3.67	3.69	2.23
60. AIRCRAFT & PARTS	6.69	6.96	7.15	7.37	7.39	7.38	2.00
61. OTHER TRANSPORTATION EQ.	0.66	0.68	0.71	0.72	0.72	0.73	1.80
62. INSTRUMENTS & SUPPLIES	3.12	3.17	3.29	3.41	3.49	3.54	2.58
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.92	0.93	0.97	1.02	1.05	1.08	3.21
64. MISC. MANUFACTURING	2.83	2.85	2.93	2.99	3.02	3.02	1.30
65. TRANSPORTATION & WAREHOUSING	2.32	2.37	2.42	2.49	2.50	2.51	1.57
66. COMMUNICATION EXC. RADIO & TV	3.00	3.04	3.12	3.16	3.25	3.29	1.82
67. RADIO & TV BROADCASTING	70.95	72.96	74.75	75.62	76.06	76.50	1.52

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
50. WRITERS, ARTISTS & ENTERTAINERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
68. UTILITIES	5.51	5.51	5.51	5.51	5.52	5.51	0.02
69. WHOLESALE & RETAIL TRADE	88.04	89.22	90.37	91.08	91.28	91.56	0.79
70. FINANCE & INSURANCE	12.52	12.81	13.15	13.56	13.99	14.41	2.85
71. REAL ESTATE & RENTAL	1.01	1.03	1.05	1.08	1.10	1.11	2.08
72. PERSONAL SERVICES EXC. AUTO.	26.30	26.20	26.23	26.26	26.29	26.26	-0.03
73. BUSINESS SERVICES	56.83	58.07	59.52	61.31	62.74	63.78	2.34
74. EATING & DRINKING PLACES	25.36	25.76	26.14	26.32	26.46	26.51	0.89
76. AMUSEMENTS	101.02	102.49	105.42	107.98	110.72	113.24	2.31
77. MISC. SERVICES	110.47	111.13	112.12	113.91	116.09	118.60	1.43
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	240.24	243.71	248.18	252.31	255.80	259.06	1.52
82. GOVERNMENT INDUSTRY	37.63	37.53	37.87	38.51	39.15	39.72	1.09
TOTAL, ALL INDUSTRIES	970.71	984.73	1,002.80	1,019.47	1,033.59	1,046.76	1.52

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE
BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
51. PROFESSIONAL&TECH WORKERS NEC
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
1. LIVESTOCK & PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	2.62
2. OTHER AGRICULTURAL PRODUCTS	0.02	0.02	0.02	0.02	0.02	0.02	2.77
3. FORESTRY & FISHERY PRODUCTS	0.08	0.09	0.10	0.10	0.11	0.11	5.44
4. AGR.,FORESTRY,&FISHERY SERV.	0.05	0.06	0.06	0.07	0.07	0.07	6.58
5. IRON ORE MINING	0.03	0.03	0.03	0.03	0.04	0.04	8.27
6. NONFERROUS METAL MINING	0.07	0.08	0.09	0.10	0.11	0.12	10.67
7. COAL MINING	0.08	0.09	0.09	0.10	0.11	0.12	8.95
8. CRUDE PETROLEUM & N. GAS	1.03	1.11	1.16	1.24	1.31	1.34	5.31
9. STONE&CLAY MINING & QUARRYING	0.03	0.04	0.04	0.04	0.05	0.05	10.13
10. CHEM&FERTILIZER MIN. MINING	0.01	0.01	0.01	0.01	0.01	0.01	7.97
11. NEW CONSTRUCTION	3.38	3.84	4.13	4.58	4.94	5.19	8.95
13. ORDNANCE & ACCESSORIES	12.17	13.83	15.14	16.44	17.42	18.16	8.33
14. FOOD & KINDRED PRODUCTS	0.12	0.13	0.14	0.15	0.15	0.16	5.39
16. FABRIC,YARN & THREAD MILLS	0.03	0.04	0.04	0.04	0.04	0.04	4.83
17. MISC. TEXTILE GOODS	0.02	0.02	0.02	0.02	0.03	0.03	7.74
18. APPAREL	0.02	0.02	0.02	0.02	0.02	0.03	6.51
19. MISC. FABRICATED TEXTILE PROD.	0.03	0.04	0.04	0.04	0.04	0.04	4.68
20. LUMBER & WOOD PRODUCTS	0.12	0.14	0.15	0.16	0.18	0.19	9.67
21. WOOD CONTAINERS	0.02	0.02	0.02	0.03	0.03	0.03	9.83
22. HOUSEHOLD FURNITURE	0.02	0.02	0.02	0.02	0.02	0.02	4.01
23. OTHER FURNITURE & FIXTURES	0.04	0.04	0.04	0.04	0.04	0.04	4.47
24. PAPER & ALLIED PRODUCTS	0.15	0.16	0.18	0.19	0.20	0.20	6.71
25. PAPERBOARD CONTAINERS & BOXES	0.05	0.06	0.06	0.07	0.08	0.08	8.79
26. PRINTING & PUBLISHING	0.26	0.28	0.30	0.33	0.34	0.35	6.10
27. CHEMICALS & PRODUCTS	0.61	0.67	0.72	0.78	0.84	0.88	7.58
28. PLASTICS & SYNTHETIC MAT'LS.	0.10	0.11	0.12	0.13	0.14	0.15	8.89
29. DRUGS,CLEANING & TOILET PREP.	0.03	0.03	0.03	0.04	0.04	0.04	4.54
30. PAINTS & ALLIED PRODUCTS	0.05	0.06	0.06	0.07	0.07	0.08	8.19
31. PET REFINING & REL. PROD.	0.29	0.30	0.32	0.34	0.36	0.36	4.95
32. RUBBER & MISC. PLASTICS PROD.	0.24	0.27	0.30	0.34	0.37	0.39	10.72
35. GLASS & GLASS PRODUCTS	0.04	0.05	0.06	0.06	0.07	0.07	10.00
36. STONE & CLAY PRODUCTS	0.16	0.18	0.19	0.21	0.23	0.24	8.02
37. PRIMARY FERROUS METALS	0.46	0.51	0.56	0.60	0.64	0.67	7.69
38. NONFERROUS METALS	0.52	0.59	0.65	0.72	0.78	0.82	9.46
39. METAL CONTAINERS	0.02	0.02	0.02	0.02	0.02	0.02	6.60
40. FAB. STRUCTURAL METAL PRODUCTS	0.60	0.68	0.73	0.78	0.83	0.88	7.73
41. SCREW MACHINE PROD.&STAMPINGS	0.28	0.32	0.34	0.37	0.39	0.41	7.71

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
51. PROFESSIONAL&TECH WORKERS NEC
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
42. OTHER FAB. METAL PRODUCTS	0.27	0.31	0.34	0.37	0.41	0.43	9.84
43. ENGINES & TURBINES	0.32	0.36	0.39	0.41	0.43	0.45	6.78
44. FARM & GARDEN MACHINERY	0.01	0.01	0.01	0.01	0.02	0.02	8.20
45. CONSTR. & MINING MACHINERY	0.07	0.07	0.08	0.09	0.09	0.09	7.60
46. MATERIALS HANDLING MACH. & EQ.	0.11	0.13	0.14	0.16	0.17	0.18	9.48
47. METALWORKING MACH. & EQ.	0.26	0.30	0.33	0.37	0.40	0.42	9.79
48. SPECIAL INDUSTRY MACHINERY	0.03	0.03	0.03	0.04	0.04	0.05	12.45
49. GENERAL INDUSTRY MACHINERY	0.26	0.30	0.32	0.35	0.37	0.39	7.83
50. MISC. NONELECTRICAL MACH.	0.29	0.32	0.35	0.39	0.41	0.42	7.53
51. OFFICE,COMPUTING & ACCT. MACH.	0.62	0.72	0.79	0.86	0.91	0.94	8.78
52. SERVICE INDUSTRY MACHINES	0.06	0.07	0.08	0.09	0.10	0.11	13.37
53. ELECTRICAL MACHINERY	0.28	0.33	0.36	0.39	0.42	0.44	9.13
54. HOUSEHOLD APPLIANCES	0.01	0.01	0.01	0.01	0.01	0.01	9.50
55. ELECTRIC LIGHTING & WIRING EQ.	0.13	0.14	0.15	0.17	0.18	0.19	8.25
56. RADIO,TV, & COMMUNICATION EQ.	9.77	11.26	12.40	13.48	14.22	14.57	8.33
57. ELECTRONIC COMPONENTS & ACCESS.	2.01	2.40	2.71	3.04	3.33	3.50	11.69
58. MISC. ELECTRICAL MACH. & EQ.	0.06	0.07	0.07	0.08	0.09	0.09	9.57
59. MOTOR VEHICLES & EQUIPMENT	0.21	0.25	0.29	0.34	0.40	0.47	17.55
60. AIRCRAFT & PARTS	14.54	16.44	18.11	19.98	21.36	21.92	8.55
61. OTHER TRANSPORTATION EQ.	1.63	1.72	1.78	1.81	1.87	1.92	3.33
62. INSTRUMENTS & SUPPLIES	1.26	1.42	1.55	1.70	1.82	1.88	8.40
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.17	0.19	0.21	0.23	0.25	0.26	8.55
64. MISC. MANUFACTURING	0.05	0.06	0.06	0.06	0.07	0.07	6.19
65. TRANSPORTATION & WAREHOUSING	1.31	1.39	1.46	1.56	1.63	1.68	5.13
66. COMMUNICATION EXC. RADIO & TV	0.42	0.45	0.48	0.52	0.55	0.56	5.85
67. RADIO & TV BROADCASTING	0.13	0.15	0.16	0.18	0.19	0.20	8.28
68. UTILITIES	0.51	0.56	0.60	0.65	0.68	0.70	6.44
69. WHOLESALE & RETAIL TRADE	2.59	2.94	3.24	3.59	3.89	4.10	9.62
70. FINANCE & INSURANCE	2.86	3.24	3.58	3.98	4.32	4.54	9.69
71. REAL ESTATE & RENTAL	0.29	0.33	0.37	0.41	0.45	0.47	9.76
72. PERSONAL SERVICES EXC. AUTO.	1.11	1.26	1.37	1.51	1.62	1.71	8.96
73. BUSINESS SERVICES	5.06	5.79	6.47	7.26	7.90	8.33	10.49
74. EATING & DRINKING PLACES	0.14	0.16	0.18	0.20	0.21	0.22	9.76
75. AUTOMOBILE REPAIR & SERVICE	0.09	0.10	0.11	0.12	0.13	0.13	7.37
76. AMUSEMENTS	0.10	0.11	0.12	0.13	0.15	0.15	8.56
77. MISC. SERVICES	10.97	11.27	11.73	12.43	13.02	13.33	3.98
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	34.55	35.39	36.86	38.61	39.75	40.39	3.17
82. GOVERNMENT INDUSTRY	62.24	61.32	62.79	64.82	66.19	66.93	1.46
TOTAL, ALL INDUSTRIES	176.06	185.31	196.12	208.73	218.17	223.72	4.91

2/1/83

TOTAL EMPLOYMENT

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
51. PROFESSIONAL&TECH WORKERS NEC
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
1. LIVESTOCK & PRODUCTS	1.42	1.43	1.41	1.39	1.38	1.37	-0.78
2. OTHER AGRICULTURAL PRODUCTS	10.41	10.46	10.50	10.47	10.45	10.43	0.03
3. FORESTRY & FISHERY PRODUCTS	3.35	3.51	3.72	3.86	3.85	3.79	2.49
4. AGR.,FORESTRY,&FISHERY SERV.	2.91	2.98	3.00	3.06	3.09	3.13	1.50
5. IRON ORE MINING	0.49	0.53	0.57	0.56	0.55	0.54	2.08
6. NONFERROUS METAL MINING	1.22	1.29	1.34	1.37	1.35	1.36	2.11
7. COAL MINING	2.72	2.86	2.96	3.03	3.13	3.20	3.26
8. CRUDE PETROLEUM & N. GAS	14.01	14.15	14.27	14.15	14.09	14.35	0.48
9. STONE&CLAY MINING & QUARRYING	1.00	1.02	1.06	1.10	1.13	1.14	2.72
10. CHEM&FERTILIZER MIN. MINING	0.46	0.47	0.49	0.50	0.50	0.51	2.06
11. NEW CONSTRUCTION	90.01	92.17	94.31	97.57	100.20	101.85	2.50
13. ORDNANCE & ACCESSORIES	20.13	20.69	21.15	21.74	22.12	22.45	2.20
14. FOOD & KINDRED PRODUCTS	17.99	18.29	18.45	18.44	18.31	18.22	0.26
16. FABRIC,YARN & THREAD MILLS	2.66	2.74	2.80	2.85	2.87	2.86	1.45
17. MISC. TEXTILE GOODS	1.25	1.31	1.37	1.42	1.46	1.48	3.32
18. APPAREL	5.16	5.22	5.36	5.49	5.52	5.54	1.45
19. MISC. FABRICATED TEXTILE PROD.	1.18	1.21	1.25	1.27	1.29	1.30	1.86
20. LUMBER & WOOD PRODUCTS	5.74	6.26	6.54	6.83	6.95	6.93	3.82
21. WOOD CONTAINERS	0.32	0.32	0.33	0.34	0.34	0.34	1.17
22. HOUSEHOLD FURNITURE	3.10	3.28	3.40	3.52	3.61	3.65	3.34
23. OTHER FURNITURE & FIXTURES	2.23	2.25	2.31	2.38	2.43	2.47	2.05
24. PAPER & ALLIED PRODUCTS	7.95	8.19	8.28	8.31	8.31	8.30	0.87
25. PAPERBOARD CONTAINERS & BOXES	2.40	2.47	2.53	2.57	2.60	2.62	1.72
26. PRINTING & PUBLISHING	16.68	16.74	16.86	16.98	17.03	17.08	0.48
27. CHEMICALS & PRODUCTS	12.63	12.86	13.05	13.18	13.25	13.31	1.07
28. PLASTICS & SYNTHETIC MATLS.	4.04	4.20	4.36	4.48	4.55	4.57	2.48
29. DRUGS,CLEANING & TOILET PREP.	8.92	9.02	9.19	9.34	9.38	9.44	1.12
30. PAINTS & ALLIED PRODUCTS	0.98	1.02	1.06	1.09	1.12	1.13	2.96
31. PET REFINING & REL. PROD.	5.32	5.30	5.31	5.35	5.34	5.32	0.02
32. RUBBER & MISC. PLASTICS PROD.	8.67	9.00	9.41	9.76	10.04	10.18	3.26
35. GLASS & GLASS PRODUCTS	2.01	2.06	2.11	2.14	2.15	2.14	1.24
36. STONE & CLAY PRODUCTS	4.96	5.04	5.11	5.23	5.24	5.16	0.81
37. PRIMARY FERROUS METALS	6.49	6.68	6.88	6.96	6.97	6.94	1.33
38. NONFERROUS METALS	6.13	6.36	6.63	6.83	6.95	7.05	2.86
39. METAL CONTAINERS	1.10	1.09	1.09	1.11	1.12	1.12	0.35
40. FAB. STRUCTURAL METAL PRODUCTS	13.53	13.57	13.92	14.40	14.72	14.93	1.99

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
51. PROFESSIONAL&TECH WORKERS NEC
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
41. SCREW MACHINE PROD.&STAMPINGS	4.61	4.85	5.00	5.09	5.12	5.14	2.18
42. OTHER FAB. METAL PRODUCTS	5.84	6.03	6.30	6.50	6.66	6.81	3.13
43. ENGINES & TURBINES	3.89	3.98	4.09	4.10	4.08	4.07	0.90
44. FARM & GARDEN MACHINERY	3.31	3.40	3.57	3.63	3.67	3.71	2.36
45. CONSTR. & MINING MACHINERY	5.53	5.87	6.20	6.44	6.63	6.72	3.98
46. MATERIALS HANDLING MACH. & EQ.	1.98	2.05	2.18	2.28	2.34	2.40	3.96
47. METALWORKING MACH. & EQ.	5.11	5.34	5.68	5.93	6.13	6.26	4.17
48. SPECIAL INDUSTRY MACHINERY	3.56	3.65	3.84	4.03	4.14	4.24	3.58
49. GENERAL INDUSTRY MACHINERY	6.04	6.21	6.52	6.71	6.85	6.98	2.92
50. MISC. NONELECTRICAL MACH.	2.56	2.63	2.74	2.80	2.83	2.86	2.22
51. OFFICE,COMPUTING & ACCT. MACH.	16.39	17.31	18.31	18.89	19.39	20.06	4.12
52. SERVICE INDUSTRY MACHINES	3.26	3.39	3.55	3.60	3.61	3.62	2.11
53. ELECTRICAL MACHINERY	5.71	5.81	6.07	6.21	6.28	6.33	2.08
54. HOUSEHOLD APPLIANCES	2.03	2.09	2.15	2.22	2.27	2.30	2.48
55. ELECTRIC LIGHTING & WIRING EQ.	2.65	2.67	2.74	2.81	2.85	2.88	1.70
56. RADIO,TV, & COMMUNICATION EQ.	23.12	23.72	24.52	24.99	25.27	25.75	2.17
57. ELECTRONIC COMPONENTS & ACCESS.	9.18	9.61	10.12	10.56	10.89	11.15	3.95
58. MISC. ELECTRICAL MACH. & EQ.	2.20	2.27	2.36	2.39	2.42	2.44	2.12
59. MOTOR VEHICLES & EQUIPMENT	10.84	11.37	11.80	12.03	12.21	12.31	2.59
60. AIRCRAFT & PARTS	29.13	30.28	31.09	32.06	32.13	32.09	1.96
61. OTHER TRANSPORTATION EQ.	5.64	5.80	6.00	6.13	6.15	6.20	1.92
62. INSTRUMENTS & SUPPLIES	10.81	11.01	11.47	11.93	12.27	12.49	2.93
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	3.97	4.03	4.20	4.39	4.53	4.65	3.19
64. MISC. MANUFACTURING	4.71	4.79	4.95	5.10	5.19	5.23	2.15
65. TRANSPORTATION & WAREHOUSING	30.70	31.63	32.51	33.54	33.98	34.22	2.19
66. COMMUNICATION EXC. RADIO & TV	17.06	17.31	17.84	18.14	18.67	18.95	2.12
67. RADIO & TV BROADCASTING	6.63	6.85	7.04	7.14	7.20	7.27	1.84
68. UTILITIES	23.68	23.82	23.93	24.03	24.16	24.25	0.47
69. WHOLESALE & RETAIL TRADE	423.87	437.51	451.17	462.76	471.86	481.34	2.58
70. FINANCE & INSURANCE	333.67	340.38	348.42	358.40	368.94	379.03	2.58
71. REAL ESTATE & RENTAL	10.72	11.11	11.55	11.96	12.31	12.62	3.31
72. PERSONAL SERVICES EXC. AUTO.	60.60	61.91	63.51	65.12	66.74	68.21	2.39
73. BUSINESS SERVICES	104.29	109.71	115.55	122.12	128.01	133.12	5.00
74. EATING & DRINKING PLACES	8.97	9.13	9.28	9.36	9.42	9.45	1.06
75. AUTOMOBILE REPAIR & SERVICE	6.44	6.57	6.64	6.68	6.72	6.79	1.05
76. AMUSEMENTS	10.44	10.60	10.91	11.18	11.47	11.74	2.37
77. MISC. SERVICES	1,699.59	1,720.51	1,746.23	1,784.39	1,828.84	1,878.67	2.02
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	585.94	594.86	606.34	620.27	634.02	648.12	2.04
82. GOVERNMENT INDUSTRY	829.40	827.84	835.63	849.23	862.91	877.00	1.12

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
51. PROFESSIONAL&TECH WORKERS NEC
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
TOTAL, ALL INDUSTRIES	4,616.63	4,686.86	4,777.35	4,887.13	4,995.44	5,106.53	2.04

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE
BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
52. BUSINESS PROFESSIONALS&STAFF
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
1. LIVESTOCK & PRODUCTS	0.07	0.08	0.08	0.08	0.08	0.08	2.60
2. OTHER AGRICULTURAL PRODUCTS	0.13	0.13	0.14	0.14	0.15	0.15	3.15
3. FORESTRY & FISHERY PRODUCTS	0.11	0.11	0.12	0.13	0.14	0.14	5.92
4. AGR.,FORESTRY,&FISHERY SERV.	0.45	0.49	0.53	0.57	0.61	0.64	7.14
5. IRON ORE MINING	0.12	0.14	0.15	0.16	0.17	0.18	8.08
6. NONFERROUS METAL MINING	0.36	0.42	0.47	0.52	0.56	0.60	10.51
7. COAL MINING	0.62	0.70	0.77	0.84	0.92	0.96	9.24
8. CRUDE PETROLEUM & N. GAS	5.31	5.64	5.83	6.14	6.43	6.48	4.04
9. STONE&CLAY MINING & QUARRYING	0.55	0.62	0.67	0.76	0.83	0.88	9.94
10. CHEM&FERTILIZER MIN. MINING	0.06	0.07	0.07	0.08	0.08	0.09	7.91
11. NEW CONSTRUCTION	25.05	28.48	30.78	34.16	36.93	38.91	9.21
13. ORDNANCE & ACCESSORIES	29.36	33.29	36.37	39.40	41.66	43.33	8.09
14. FOOD & KINDRED PRODUCTS	2.21	2.39	2.52	2.66	2.77	2.83	5.10
15. TOBACCO MANUFACTURES	0.01	0.02	0.02	0.02	0.02	0.02	6.76
16. FABRIC,YARN & THREAD MILLS	0.53	0.57	0.60	0.63	0.66	0.68	5.13
17. MISC. TEXTILE GOODS	0.29	0.31	0.34	0.37	0.39	0.41	7.12
18. APPAREL	0.58	0.62	0.65	0.70	0.74	0.79	6.40
19. MISC. FABRICATED TEXTILE PROD.	1.02	1.08	1.13	1.20	1.25	1.29	4.77
20. LUMBER & WOOD PRODUCTS	1.32	1.51	1.64	1.79	1.96	2.09	9.54
21. WOOD CONTAINERS	0.29	0.33	0.36	0.40	0.43	0.46	9.81
22. HOUSEHOLD FURNITURE	0.25	0.27	0.29	0.30	0.30	0.30	3.79
23. OTHER FURNITURE & FIXTURES	0.48	0.50	0.52	0.55	0.57	0.60	4.63
24. PAPER & ALLIED PRODUCTS	1.38	1.52	1.65	1.77	1.86	1.92	6.81
25. PAPERBOARD CONTAINERS & BOXES	0.78	0.87	0.96	1.06	1.14	1.20	9.09
26. PRINTING & PUBLISHING	7.40	8.05	8.64	9.34	9.84	10.15	6.55
27. CHEMICALS & PRODUCTS	5.37	5.92	6.34	6.87	7.38	7.72	7.51
28. PLASTICS & SYNTHETIC MATLS.	0.70	0.78	0.86	0.95	1.02	1.07	8.90
29. DRUGS,CLEANING & TOILET PREP.	0.50	0.52	0.55	0.58	0.60	0.61	4.28
30. PAINTS & ALLIED PRODUCTS	1.03	1.14	1.23	1.35	1.46	1.53	8.30
31. PET REFINING & REL. PROD.	1.81	1.91	2.02	2.15	2.26	2.33	5.18
32. RUBBER & MISC. PLASTICS PROD.	2.91	3.31	3.70	4.17	4.59	4.87	10.82
33. LEATHER TANNING & FINISHING	0.01	0.01	0.01	0.01	0.01	0.01	5.37
34. FOOTWEAR & OTHER LEATHER PROD.	0.06	0.07	0.07	0.08	0.08	0.08	6.00
35. GLASS & GLASS PRODUCTS	0.50	0.57	0.64	0.72	0.78	0.84	10.80
36. STONE & CLAY PRODUCTS	2.52	2.88	3.09	3.42	3.67	3.86	8.93
37. PRIMARY FERROUS METALS	4.74	5.27	5.69	6.20	6.60	6.88	7.74
38. NONFERROUS METALS	4.73	5.43	5.97	6.58	7.09	7.42	9.40

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
52. BUSINESS PROFESSIONALS&STAFF
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
39. METAL CONTAINERS	0.12	0.13	0.14	0.15	0.16	0.17	6.60
40. FAB. STRUCTURAL METAL PRODUCTS	5.16	5.82	6.23	6.72	7.14	7.55	7.90
41. SCREW MACHINE PROD.&STAMPINGS	2.67	2.99	3.22	3.51	3.73	3.89	7.82
42. OTHER FAB. METAL PRODUCTS	3.27	3.75	4.12	4.57	4.95	5.24	9.84
43. ENGINES & TURBINES	1.46	1.65	1.81	1.93	2.04	2.13	7.86
44. FARM & GARDEN MACHINERY	0.07	0.08	0.09	0.09	0.10	0.11	8.34
45. CONSTR. & MINING MACHINERY	0.61	0.68	0.73	0.78	0.82	0.85	6.78
46. MATERIALS HANDLING MACH. & EQ.	1.04	1.19	1.29	1.42	1.52	1.58	8.64
47. METALWORKING MACH. & EQ.	3.45	3.95	4.34	4.80	5.16	5.38	9.33
48. SPECIAL INDUSTRY MACHINERY	0.30	0.35	0.39	0.44	0.50	0.53	12.20
49. GENERAL INDUSTRY MACHINERY	2.75	3.08	3.32	3.57	3.79	3.95	7.52
50. MISC. NONELECTRICAL MACH.	4.70	5.12	5.61	6.16	6.54	6.74	7.47
51. OFFICE,COMPUTING & ACCT. MACH.	3.94	4.52	4.92	5.29	5.52	5.68	7.62
52. SERVICE INDUSTRY MACHINES	0.60	0.70	0.77	0.89	1.01	1.13	13.51
53. ELECTRICAL MACHINERY	2.68	3.07	3.36	3.70	3.99	4.18	9.31
54. HOUSEHOLD APPLIANCES	0.05	0.06	0.06	0.07	0.08	0.08	9.75
55. ELECTRIC LIGHTING & WIRING EQ.	1.75	1.98	2.13	2.35	2.53	2.64	8.57
56. RADIO,TV, & COMMUNICATION EQ.	55.24	63.46	69.66	75.47	79.37	81.08	7.98
57. ELECTRONIC COMPONENTS & ACCESS.	16.03	19.10	21.53	24.11	26.33	27.62	11.49
58. MISC. ELECTRICAL MACH. & EQ.	0.69	0.80	0.87	0.96	1.04	1.10	9.72
59. MOTOR VEHICLES & EQUIPMENT	1.66	1.99	2.26	2.68	3.15	3.68	17.22
60. AIRCRAFT & PARTS	58.64	66.26	72.93	80.39	85.88	88.07	8.48
61. OTHER TRANSPORTATION EQ.	8.44	8.90	9.19	9.39	9.69	9.99	3.45
62. INSTRUMENTS & SUPPLIES	13.72	15.47	16.89	18.50	19.71	20.41	8.28
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	2.09	2.30	2.50	2.76	2.98	3.15	8.54
64. MISC. MANUFACTURING	0.94	1.03	1.09	1.16	1.22	1.25	5.86
65. TRANSPORTATION & WAREHOUSING	64.39	68.34	71.65	76.30	79.60	81.36	4.79
66. COMMUNICATION EXC. RADIO & TV	17.24	18.26	19.36	20.85	21.98	22.42	5.39
67. RADIO & TV BROADCASTING	1.81	2.04	2.23	2.43	2.59	2.72	8.46
68. UTILITIES	5.94	6.51	7.00	7.52	7.90	8.04	6.23
69. WHOLESALE & RETAIL TRADE	70.19	79.37	87.45	96.92	104.93	110.47	9.50
70. FINANCE & INSURANCE	30.35	34.30	37.87	42.03	45.52	47.73	9.48
71. REAL ESTATE & RENTAL	7.43	8.28	9.08	9.96	10.69	11.14	8.44
72. PERSONAL SERVICES EXC. AUTO.	15.98	17.94	19.46	21.26	22.68	23.78	8.28
73. BUSINESS SERVICES	49.22	55.56	61.27	67.90	73.13	76.35	9.18
74. EATING & DRINKING PLACES	11.50	13.28	14.88	16.63	18.07	18.97	10.53
75. AUTOMOBILE REPAIR & SERVICE	2.70	2.98	3.21	3.47	3.69	3.81	7.16
76. AMUSEMENTS	2.31	2.54	2.75	3.02	3.24	3.42	8.20
77. MISC. SERVICES	33.91	34.80	36.19	38.34	40.13	41.07	3.90

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
52. BUSINESS PROFESSIONALS&STAFF
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	124.06	129.82	136.72	144.71	150.19	153.24	4.32
82. GOVERNMENT INDUSTRY	267.60	263.09	268.89	277.05	282.37	285.03	1.27
TOTAL, ALL INDUSTRIES	1,000.33	1,071.52	1,142.90	1,227.10	1,291.72	1,330.14	5.86
TOTAL EMPLOYMENT							
1. LIVESTOCK & PRODUCTS	12.05	12.15	11.96	11.75	11.67	11.57	-0.81
2. OTHER AGRICULTURAL PRODUCTS	87.92	88.59	89.34	89.35	89.49	89.69	0.40
3. FORESTRY & FISHERY PRODUCTS	4.21	4.44	4.73	4.93	4.94	4.87	2.96
4. AGR.,FORESTRY,&FISHERY SERV.	24.63	25.39	25.73	26.36	26.74	27.23	2.03
5. IRON ORE MINING	2.34	2.52	2.70	2.67	2.62	2.57	1.90
6. NONFERROUS METAL MINING	6.22	6.53	6.76	6.91	6.84	6.85	1.97
7. COAL MINING	22.14	23.32	24.23	24.87	25.74	26.33	3.53
8. CRUDE PETROLEUM & N. GAS	71.99	71.80	71.52	70.05	68.94	69.37	-0.74
9. STONE&CLAY MINING & QUARRYING	17.46	17.82	18.42	19.20	19.62	19.79	2.54
10. CHEM&FERTILIZER MIN. MINING	2.95	3.02	3.12	3.20	3.23	3.25	2.01
11. NEW CONSTRUCTION	666.71	684.55	702.17	728.19	749.47	763.46	2.75
13. ORDNANCE & ACCESSORIES	48.58	49.80	50.79	52.09	52.89	53.57	1.98
14. FOOD & KINDRED PRODUCTS	330.26	334.84	336.93	335.81	332.60	329.98	-0.02
15. TOBACCO MANUFACTURES	11.15	11.11	10.93	10.72	10.56	10.33	-1.51
16. FABRIC,YARN & THREAD MILLS	42.62	43.89	45.07	45.96	46.38	46.45	1.74
17. MISC. TEXTILE GOODS	19.79	20.54	21.39	22.09	22.46	22.63	2.72
18. APPAREL	160.51	162.39	166.61	170.30	171.04	171.65	1.35
19. MISC. FABRICATED TEXTILE PROD.	34.66	35.57	36.56	37.29	37.76	38.16	1.94
20. LUMBER & WOOD PRODUCTS	64.06	69.76	72.83	75.96	77.13	76.82	3.70
21. WOOD CONTAINERS	4.79	4.79	4.88	5.00	5.05	5.08	1.16
22. HOUSEHOLD FURNITURE	42.89	45.27	46.80	48.41	49.50	50.00	3.12
23. OTHER FURNITURE & FIXTURES	30.21	30.43	31.39	32.33	33.01	33.70	2.21
24. PAPER & ALLIED PRODUCTS	74.31	76.63	77.57	77.95	77.99	78.00	0.97
25. PAPERBOARD CONTAINERS & BOXES	35.30	36.36	37.30	38.12	38.64	38.98	2.01
26. PRINTING & PUBLISHING	470.80	474.60	480.10	485.49	489.16	492.49	0.90
27. CHEMICALS & PRODUCTS	111.61	113.58	115.20	116.22	116.78	117.29	1.00
28. PLASTICS & SYNTHETIC MATLS.	28.84	29.95	31.11	31.95	32.43	32.61	2.49
29. DRUGS,CLEANING & TOILET PREP.	140.77	141.90	144.26	146.19	146.41	147.00	0.87
30. PAINTS & ALLIED PRODUCTS	19.50	20.44	21.18	21.92	22.39	22.68	3.07
31. PET REFINING & REL. PROD.	33.56	33.51	33.69	33.98	34.03	33.98	0.25
32. RUBBER & MISC. PLASTICS PROD.	107.06	111.27	116.53	120.87	124.49	126.27	3.36
33. LEATHER TANNING & FINISHING	2.08	2.15	2.23	2.23	2.23	2.22	1.28
34. FOOTWEAR & OTHER LEATHER PROD.	24.05	24.28	24.56	24.66	24.63	24.62	0.47

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
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ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
52. BUSINESS PROFESSIONALS&STAFF
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
35. GLASS & GLASS PRODUCTS	22.85	23.60	24.36	24.90	25.11	25.20	1.98
36. STONE & CLAY PRODUCTS	77.91	79.96	81.79	84.28	85.15	84.57	1.66
37. PRIMARY FERROUS METALS	66.50	68.47	70.56	71.37	71.58	71.21	1.38
38. NONFERROUS METALS	55.94	58.05	60.45	62.26	63.31	64.24	2.81
39. METAL CONTAINERS	8.17	8.06	8.08	8.22	8.28	8.32	0.35
40. FAB. STRUCTURAL METAL PRODUCTS	115.60	116.19	119.35	123.66	126.60	128.59	2.15
41. SCREW MACHINE PROD.&STAMPINGS	43.52	45.79	47.33	48.19	48.49	48.73	2.29
42. OTHER FAB. METAL PRODUCTS	71.19	73.49	76.80	79.29	81.15	83.08	3.14
43. ENGINES & TURBINES	17.51	18.10	18.80	19.02	19.15	19.25	1.91
44. FARM & GARDEN MACHINERY	21.57	22.19	23.39	23.76	24.07	24.39	2.49
45. CONSTR. & MINING MACHINERY	51.44	54.12	56.69	58.45	59.76	60.19	3.19
46. MATERIALS HANDLING MACH. & EQ.	18.39	18.89	19.94	20.67	21.14	21.50	3.17
47. METALWORKING MACH. & EQ.	66.93	69.63	73.75	76.72	78.92	80.39	3.74
48. SPECIAL INDUSTRY MACHINERY	41.39	42.32	44.49	46.54	47.74	48.80	3.35
49. GENERAL INDUSTRY MACHINERY	62.68	64.24	67.26	69.05	70.22	71.35	2.62
50. MISC. NONELECTRICAL MACH.	41.08	42.12	43.87	44.83	45.21	45.71	2.16
51. OFFICE,COMPUTING & ACCT. MACH.	104.44	108.93	113.85	116.25	118.18	121.15	3.01
52. SERVICE INDUSTRY MACHINES	33.09	34.44	36.13	36.76	36.89	36.95	2.23
53. ELECTRICAL MACHINERY	53.79	54.84	57.42	58.85	59.59	60.11	2.24
54. HOUSEHOLD APPLIANCES	20.22	20.82	21.44	22.22	22.75	23.11	2.71
55. ELECTRIC LIGHTING & WIRING EQ.	36.68	37.06	38.18	39.22	39.91	40.51	2.00
56. RADIO,TV, & COMMUNICATION EQ.	130.80	133.70	137.73	139.95	141.06	143.25	1.84
57. ELECTRONIC COMPONENTS & ACCESS.	73.18	76.41	80.30	83.64	86.13	88.03	3.76
58. MISC. ELECTRICAL MACH. & EQ.	25.47	26.39	27.48	27.83	28.22	28.48	2.26
59. MOTOR VEHICLES & EQUIPMENT	85.94	89.91	93.02	94.58	95.69	96.29	2.30
60. AIRCRAFT & PARTS	117.45	122.02	125.21	129.01	129.19	128.95	1.89
61. OTHER TRANSPORTATION EQ.	29.11	30.00	31.09	31.79	31.89	32.19	2.03
62. INSTRUMENTS & SUPPLIES	117.85	119.96	124.75	129.66	133.13	135.39	2.81
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	48.24	48.91	51.00	53.24	55.01	56.40	3.17
64. MISC. MANUFACTURING	85.25	86.43	89.08	91.47	92.78	93.33	1.83
65. TRANSPORTATION & WAREHOUSING	1,514.87	1,555.17	1,593.12	1,638.26	1,654.65	1,660.79	1.86
66. COMMUNICATION EXC. RADIO & TV	695.02	701.75	720.13	729.02	747.31	755.46	1.68
67. RADIO & TV BROADCASTING	91.27	94.37	97.17	98.78	99.80	100.83	2.01
68. UTILITIES	276.29	277.26	278.03	278.67	279.59	280.06	0.27
69. WHOLESALE & RETAIL TRADE	11,471.62	11,826.50	12,181.51	12,480.45	12,712.35	12,954.24	2.46
70. FINANCE & INSURANCE	3,542.16	3,605.82	3,683.78	3,782.20	3,886.48	3,985.94	2.39
71. REAL ESTATE & RENTAL	269.98	275.89	282.92	289.53	294.74	298.97	2.06
72. PERSONAL SERVICES EXC. AUTO.	871.46	884.23	901.04	918.11	935.29	950.34	1.75
73. BUSINESS SERVICES	1,014.24	1,052.26	1,094.30	1,142.90	1,184.99	1,219.75	3.76

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
52. BUSINESS PROFESSIONALS&STAFF
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
74. EATING & DRINKING PLACES	744.30	763.80	782.22	794.41	805.07	812.75	1.78
75. AUTOMOBILE REPAIR & SERVICE	185.85	189.26	190.77	191.52	192.49	193.96	0.86
76. AMUSEMENTS	236.30	239.03	245.16	250.42	256.10	261.26	2.03
77. MISC. SERVICES	5,253.46	5,314.20	5,389.84	5,503.87	5,637.26	5,787.16	1.95
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	3,272.41	3,342.00	3,420.91	3,499.89	3,567.92	3,632.79	2.11
82. GOVERNMENT INDUSTRY	2,745.93	2,734.16	2,753.66	2,793.03	2,832.48	2,871.15	0.90
TOTAL, ALL INDUSTRIES	36,695.82	37,474.43	38,357.29	39,240.36	40,000.38	40,725.37	2.11

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
53. MANAGERS, OFFICIALS&PROPRIETORS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
2. OTHER AGRICULTURAL PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	2.79
3. FORESTRY & FISHERY PRODUCTS	0.07	0.08	0.08	0.09	0.09	0.10	6.03
4. AGR.,FORESTRY,&FISHERY SERV.	0.16	0.17	0.18	0.20	0.21	0.22	6.86
5. IRON ORE MINING	0.03	0.04	0.04	0.04	0.05	0.05	8.06
6. NONFERROUS METAL MINING	0.14	0.16	0.18	0.20	0.21	0.23	10.38
7. COAL MINING	0.29	0.33	0.36	0.39	0.43	0.45	9.00
8. CRUDE PETROLEUM & N. GAS	1.96	2.07	2.13	2.23	2.32	2.33	3.53
9. STONE&CLAY MINING & QUARRYING	0.25	0.28	0.31	0.35	0.38	0.40	9.91
10. CHEM&FERTILIZER MIN. MINING	0.03	0.03	0.04	0.04	0.04	0.05	7.91
11. NEW CONSTRUCTION	13.28	15.07	16.26	18.01	19.43	20.44	9.01
13. ORDNANCE & ACCESSORIES	10.23	11.57	12.60	13.61	14.35	14.89	7.79
14. FOOD & KINDRED PRODUCTS	0.70	0.76	0.80	0.85	0.88	0.90	5.06
16. FABRIC,YARN & THREAD MILLS	0.15	0.16	0.16	0.17	0.18	0.18	4.91
17. MISC. TEXTILE GOODS	0.07	0.08	0.08	0.09	0.10	0.10	7.15
18. APPAREL	0.14	0.15	0.16	0.17	0.19	0.20	7.11
19. MISC. FABRICATED TEXTILE PROD.	0.29	0.31	0.32	0.34	0.35	0.37	4.69
20. LUMBER & WOOD PRODUCTS	0.52	0.59	0.64	0.70	0.76	0.81	9.27
21. WOOD CONTAINERS	0.14	0.16	0.17	0.19	0.21	0.22	9.83
22. HOUSEHOLD FURNITURE	0.06	0.07	0.07	0.07	0.08	0.07	3.70
23. OTHER FURNITURE & FIXTURES	0.14	0.15	0.15	0.16	0.17	0.18	4.62
24. PAPER & ALLIED PRODUCTS	0.40	0.44	0.47	0.51	0.53	0.55	6.39
25. PAPERBOARD CONTAINERS & BOXES	0.22	0.25	0.27	0.30	0.32	0.34	9.22
26. PRINTING & PUBLISHING	1.71	1.86	2.01	2.17	2.30	2.38	6.81
27. CHEMICALS & PRODUCTS	1.91	2.10	2.25	2.43	2.60	2.72	7.35
28. PLASTICS & SYNTHETIC MATLS.	0.27	0.31	0.34	0.37	0.40	0.41	8.70
29. DRUGS,CLEANING & TOILET PREP.	0.13	0.13	0.14	0.15	0.15	0.15	4.11
30. PAINTS & ALLIED PRODUCTS	0.26	0.29	0.31	0.34	0.37	0.38	8.20
31. PET REFINING & REL. PROD.	0.53	0.56	0.59	0.63	0.67	0.69	5.12
32. RUBBER & MISC. PLASTICS PROD.	1.01	1.15	1.29	1.46	1.61	1.71	11.20
34. FOOTWEAR & OTHER LEATHER PROD.	0.01	0.01	0.02	0.02	0.02	0.02	6.52
35. GLASS & GLASS PRODUCTS	0.16	0.18	0.20	0.23	0.25	0.27	10.63
36. STONE & CLAY PRODUCTS	0.97	1.11	1.19	1.32	1.41	1.49	9.01
37. PRIMARY FERROUS METALS	1.23	1.37	1.48	1.61	1.72	1.79	7.85
38. NONFERROUS METALS	1.58	1.81	1.98	2.18	2.35	2.45	9.17
39. METAL CONTAINERS	0.04	0.05	0.05	0.05	0.06	0.06	6.60
40. FAB. STRUCTURAL METAL PRODUCTS	1.72	1.94	2.07	2.23	2.37	2.50	7.75
41. SCREW MACHINE PROD.&STAMPINGS	0.90	1.00	1.08	1.18	1.25	1.30	7.72

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
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ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
53. MANAGERS, OFFICIALS&PROPRIETORS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
42. OTHER FAB. METAL PRODUCTS	1.13	1.29	1.42	1.57	1.70	1.79	9.60
43. ENGINES & TURBINES	0.47	0.53	0.58	0.61	0.65	0.68	7.72
44. FARM & GARDEN MACHINERY	0.02	0.02	0.02	0.03	0.03	0.03	8.11
45. CONSTR. & MINING MACHINERY	0.16	0.17	0.18	0.20	0.20	0.21	5.29
46. MATERIALS HANDLING MACH. & EQ.	0.27	0.31	0.33	0.36	0.38	0.39	7.13
47. METALWORKING MACH. & EQ.	1.27	1.46	1.59	1.76	1.88	1.96	8.99
48. SPECIAL INDUSTRY MACHINERY	0.10	0.11	0.12	0.14	0.16	0.17	12.12
49. GENERAL INDUSTRY MACHINERY	0.77	0.86	0.92	0.99	1.04	1.08	7.08
50. MISC. NONELECTRICAL MACH.	2.25	2.44	2.66	2.91	3.08	3.16	7.05
51. OFFICE,COMPUTING & ACCT. MACH.	1.39	1.59	1.73	1.85	1.93	1.98	7.32
52. SERVICE INDUSTRY MACHINES	0.16	0.19	0.21	0.24	0.27	0.30	13.37
53. ELECTRICAL MACHINERY	0.76	0.87	0.95	1.05	1.13	1.19	9.43
54. HOUSEHOLD APPLIANCES	0.02	0.02	0.02	0.02	0.02	0.02	9.94
55. ELECTRIC LIGHTING & WIRING EQ.	0.54	0.62	0.67	0.73	0.79	0.83	8.96
56. RADIO,TV, & COMMUNICATION EQ.	16.41	18.73	20.43	21.99	22.99	23.34	7.30
57. ELECTRONIC COMPONENTS & ACCESS.	5.25	6.25	7.04	7.87	8.59	9.00	11.37
58. MISC. ELECTRICAL MACH. & EQ.	0.20	0.23	0.25	0.28	0.30	0.32	9.57
59. MOTOR VEHICLES & EQUIPMENT	0.55	0.65	0.74	0.88	1.03	1.20	17.14
60. AIRCRAFT & PARTS	19.57	22.00	24.08	26.40	28.05	28.62	7.89
61. OTHER TRANSPORTATION EQ.	2.35	2.48	2.56	2.61	2.69	2.78	3.41
62. INSTRUMENTS & SUPPLIES	4.19	4.70	5.10	5.56	5.89	6.07	7.70
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.65	0.72	0.78	0.85	0.92	0.97	8.10
64. MISC. MANUFACTURING	0.27	0.29	0.31	0.33	0.35	0.36	5.76
65. TRANSPORTATION & WAREHOUSING	12.86	13.63	14.27	15.18	15.82	16.15	4.67
66. COMMUNICATION EXC. RADIO & TV	2.95	3.15	3.36	3.64	3.86	3.95	6.01
67. RADIO & TV BROADCASTING	0.67	0.74	0.79	0.86	0.90	0.93	7.00
68. UTILITIES	1.36	1.49	1.61	1.73	1.82	1.85	6.37
69. WHOLESALE & RETAIL TRADE	11.20	12.66	13.93	15.44	16.70	17.57	9.43
70. FINANCE & INSURANCE	5.94	6.72	7.42	8.24	8.93	9.36	9.51
71. REAL ESTATE & RENTAL	2.47	2.73	2.96	3.22	3.43	3.55	7.48
72. PERSONAL SERVICES EXC. AUTO.	5.44	6.13	6.67	7.31	7.83	8.23	8.64
73. BUSINESS SERVICES	9.95	11.19	12.29	13.57	14.56	15.15	8.76
74. EATING & DRINKING PLACES	6.19	7.12	7.96	8.87	9.61	10.07	10.22
75. AUTOMOBILE REPAIR & SERVICE	1.20	1.33	1.43	1.55	1.65	1.70	7.15
76. AMUSEMENTS	0.71	0.78	0.84	0.92	0.99	1.04	8.04
77. MISC. SERVICES	8.36	8.56	8.89	9.40	9.82	10.03	3.71
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	72.14	75.98	80.13	84.86	88.01	89.75	4.46
82. GOVERNMENT INDUSTRY	51.77	51.01	52.25	53.96	55.12	55.75	1.49
TOTAL, ALL INDUSTRIES	293.70	316.52	338.01	363.08	381.93	392.95	6.00

2/1/83

TOTAL EMPLOYMENT

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
53. MANAGERS, OFFICIALS&PROPRIETORS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
2. OTHER AGRICULTURAL PRODUCTS	5.68	5.70	5.73	5.71	5.70	5.69	0.05
3. FORESTRY & FISHERY PRODUCTS	2.88	3.04	3.24	3.38	3.39	3.35	3.07
4. AGR.,FORESTRY,&FISHERY SERV.	8.47	8.70	8.80	8.99	9.10	9.24	1.76
5. IRON ORE MINING	0.64	0.68	0.73	0.73	0.71	0.70	1.89
6. NONFERROUS METAL MINING	2.37	2.49	2.58	2.63	2.60	2.60	1.85
7. COAL MINING	10.40	10.92	11.32	11.60	11.98	12.24	3.31
8. CRUDE PETROLEUM & N. GAS	26.53	26.33	26.10	25.44	24.91	24.95	-1.23
9. STONE&CLAY MINING & QUARRYING	8.00	8.16	8.44	8.79	8.98	9.06	2.51
10. CHEM&FERTILIZER MIN. MINING	1.53	1.57	1.62	1.66	1.68	1.69	2.01
11. NEW CONSTRUCTION	353.46	362.19	370.80	383.84	394.38	401.10	2.56
13. ORDNANCE & ACCESSORIES	16.93	17.30	17.60	17.99	18.22	18.41	1.69
14. FOOD & KINDRED PRODUCTS	104.93	106.34	106.96	106.56	105.50	104.62	-0.06
16. FABRIC,YARN & THREAD MILLS	11.66	11.99	12.28	12.50	12.59	12.58	1.52
17. MISC. TEXTILE GOODS	4.88	5.06	5.27	5.45	5.54	5.59	2.76
18. APPAREL	39.32	40.05	41.37	42.57	43.03	43.45	2.02
19. MISC. FABRICATED TEXTILE PROD.	9.91	10.16	10.43	10.63	10.76	10.87	1.86
20. LUMBER & WOOD PRODUCTS	25.11	27.27	28.40	29.55	29.93	29.74	3.44
21. WOOD CONTAINERS	2.31	2.30	2.35	2.40	2.43	2.44	1.17
22. HOUSEHOLD FURNITURE	10.70	11.29	11.66	12.05	12.31	12.43	3.03
23. OTHER FURNITURE & FIXTURES	8.96	9.03	9.31	9.59	9.79	9.99	2.20
24. PAPER & ALLIED PRODUCTS	21.52	22.10	22.28	22.30	22.22	22.14	0.58
25. PAPERBOARD CONTAINERS & BOXES	9.98	10.29	10.57	10.82	10.98	11.09	2.13
26. PRINTING & PUBLISHING	108.79	109.95	111.51	113.04	114.17	115.20	1.15
27. CHEMICALS & PRODUCTS	39.65	40.28	40.79	41.09	41.23	41.35	0.85
28. PLASTICS & SYNTHETIC MATLS.	11.32	11.73	12.16	12.47	12.64	12.68	2.30
29. DRUGS,CLEANING & TOILET PREP.	35.73	35.95	36.49	36.92	36.92	37.01	0.71
30. PAINTS & ALLIED PRODUCTS	4.93	5.16	5.34	5.53	5.64	5.70	2.97
31. PET REFINING & REL. PROD.	9.91	9.89	9.94	10.02	10.03	10.01	0.19
32. RUBBER & MISC. PLASTICS PROD.	37.05	38.66	40.63	42.29	43.70	44.45	3.71
34. FOOTWEAR & OTHER LEATHER PROD.	5.14	5.22	5.30	5.35	5.37	5.39	0.96
35. GLASS & GLASS PRODUCTS	7.28	7.51	7.74	7.90	7.96	7.97	1.82
36. STONE & CLAY PRODUCTS	29.94	30.75	31.47	32.46	32.82	32.62	1.73
37. PRIMARY FERROUS METALS	17.22	17.75	18.31	18.54	18.62	18.54	1.48
38. NONFERROUS METALS	18.68	19.34	20.10	20.65	20.96	21.22	2.59
39. METAL CONTAINERS	2.93	2.89	2.90	2.95	2.97	2.98	0.35
40. FAB. STRUCTURAL METAL PRODUCTS	38.56	38.69	39.69	41.06	41.98	42.59	2.01

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
53. MANAGERS, OFFICIALS&PROPRIETORS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
41. SCREW MACHINE PROD.&STAMPINGS	14.65	15.40	15.90	16.17	16.26	16.32	2.19
42. OTHER FAB. METAL PRODUCTS	24.63	25.37	26.45	27.24	27.82	28.43	2.91
43. ENGINES & TURBINES	5.61	5.79	6.01	6.07	6.10	6.13	1.78
44. FARM & GARDEN MACHINERY	6.18	6.35	6.68	6.77	6.84	6.92	2.27
45. CONSTR. & MINING MACHINERY	13.49	13.98	14.44	14.68	14.80	14.71	1.76
46. MATERIALS HANDLING MACH. & EQ.	4.82	4.88	5.08	5.19	5.24	5.26	1.74
47. METALWORKING MACH. & EQ.	24.72	25.63	27.06	28.07	28.78	29.23	3.41
48. SPECIAL INDUSTRY MACHINERY	13.20	13.49	14.17	14.81	15.18	15.51	3.28
49. GENERAL INDUSTRY MACHINERY	17.52	17.88	18.64	19.06	19.31	19.54	2.21
50. MISC. NONELECTRICAL MACH.	19.65	20.06	20.81	21.18	21.28	21.44	1.76
51. OFFICE,COMPUTING & ACCT. MACH.	36.91	38.37	39.99	40.71	41.28	42.21	2.72
52. SERVICE INDUSTRY MACHINES	8.86	9.20	9.64	9.80	9.82	9.83	2.10
53. ELECTRICAL MACHINERY	15.20	15.51	16.26	16.68	16.91	17.07	2.36
54. HOUSEHOLD APPLIANCES	6.13	6.32	6.52	6.77	6.94	7.06	2.88
55. ELECTRIC LIGHTING & WIRING EQ.	11.34	11.51	11.90	12.27	12.52	12.75	2.37
56. RADIO,TV, & COMMUNICATION EQ.	38.85	39.45	40.39	40.78	40.85	41.24	1.20
57. ELECTRONIC COMPONENTS & ACCESS.	23.98	25.01	26.25	27.32	28.10	28.69	3.65
58. MISC. ELECTRICAL MACH. & EQ.	7.45	7.71	8.02	8.11	8.21	8.28	2.12
59. MOTOR VEHICLES & EQUIPMENT	28.24	29.52	30.53	31.01	31.36	31.53	2.23
60. AIRCRAFT & PARTS	39.21	40.51	41.35	42.37	42.20	41.90	1.34
61. OTHER TRANSPORTATION EQ.	8.10	8.34	8.64	8.84	8.86	8.94	2.00
62. INSTRUMENTS & SUPPLIES	36.01	36.44	37.69	38.96	39.80	40.26	2.26
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	15.10	15.25	15.83	16.47	16.94	17.31	2.76
64. MISC. MANUFACTURING	24.47	24.78	25.52	26.18	26.53	26.66	1.73
65. TRANSPORTATION & WAREHOUSING	302.43	310.11	317.31	325.93	328.82	329.67	1.74
66. COMMUNICATION EXC. RADIO & TV	119.05	120.95	124.87	127.15	131.09	133.25	2.28
67. RADIO & TV BROADCASTING	33.53	34.16	34.68	34.78	34.69	34.62	0.64
68. UTILITIES	63.23	63.54	63.80	64.03	64.32	64.51	0.40
69. WHOLESALE & RETAIL TRADE	1,830.28	1,885.71	1,941.14	1,987.62	2,023.41	2,060.79	2.40
70. FINANCE & INSURANCE	693.70	706.38	721.86	741.36	762.00	781.70	2.42
71. REAL ESTATE & RENTAL	89.92	90.98	92.42	93.74	94.63	95.23	1.15
72. PERSONAL SERVICES EXC. AUTO.	296.63	302.07	308.88	315.78	322.72	328.94	2.09
73. BUSINESS SERVICES	205.13	211.90	219.47	228.35	235.90	242.00	3.36
74. EATING & DRINKING PLACES	400.56	409.75	418.39	423.74	428.32	431.36	1.49
75. AUTOMOBILE REPAIR & SERVICE	82.95	84.46	85.12	85.44	85.87	86.51	0.85
76. AMUSEMENTS	72.47	73.19	74.96	76.46	78.08	79.55	1.88
77. MISC. SERVICES	1,295.38	1,307.74	1,323.79	1,349.27	1,379.48	1,413.69	1.76
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	1,812.48	1,847.95	1,888.53	1,929.48	1,964.40	1,997.15	1.96
82. GOVERNMENT INDUSTRY	629.95	627.44	631.83	640.13	648.56	658.55	0.89

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
53. MANAGERS, OFFICIALS&PROPRIETORS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
TOTAL, ALL INDUSTRIES	9,430.72	9,615.30	9,826.44	10,039.52	10,221.22	10,391.59	1.96

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE
BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
54. SALES WORKERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
1. LIVESTOCK & PRODUCTS	0.02	0.02	0.02	0.02	0.02	0.02	2.59
2. OTHER AGRICULTURAL PRODUCTS	0.03	0.03	0.04	0.04	0.04	0.04	2.77
4. AGR.,FORESTRY,&FISHERY SERV.	0.04	0.04	0.04	0.05	0.05	0.05	6.87
7. COAL MINING	0.01	0.01	0.01	0.01	0.01	0.01	9.12
8. CRUDE PETROLEUM & N. GAS	0.15	0.16	0.16	0.17	0.18	0.18	4.22
9. STONE&CLAY MINING & QUARRYING	0.03	0.03	0.04	0.04	0.05	0.05	10.09
11. NEW CONSTRUCTION	1.49	1.69	1.82	2.02	2.18	2.29	9.02
13. ORDNANCE & ACCESSORIES	1.04	1.19	1.32	1.44	1.53	1.60	8.95
14. FOOD & KINDRED PRODUCTS	0.40	0.43	0.45	0.48	0.49	0.50	4.62
16. FABRIC,YARN & THREAD MILLS	0.02	0.02	0.02	0.03	0.03	0.03	4.99
17. MISC. TEXTILE GOODS	0.04	0.04	0.04	0.05	0.05	0.05	7.17
18. APPAREL	0.06	0.06	0.07	0.07	0.08	0.08	7.11
19. MISC. FABRICATED TEXTILE PROD.	0.09	0.10	0.10	0.11	0.11	0.11	4.69
20. LUMBER & WOOD PRODUCTS	0.15	0.17	0.18	0.20	0.22	0.24	9.92
21. WOOD CONTAINERS	0.03	0.03	0.04	0.04	0.04	0.04	9.83
22. HOUSEHOLD FURNITURE	0.04	0.04	0.04	0.05	0.05	0.05	3.70
23. OTHER FURNITURE & FIXTURES	0.05	0.06	0.06	0.06	0.06	0.07	4.46
24. PAPER & ALLIED PRODUCTS	0.15	0.16	0.18	0.19	0.20	0.21	7.07
25. PAPERBOARD CONTAINERS & BOXES	0.15	0.17	0.19	0.21	0.22	0.24	9.30
26. PRINTING & PUBLISHING	1.27	1.38	1.49	1.61	1.70	1.75	6.62
27. CHEMICALS & PRODUCTS	0.55	0.61	0.65	0.70	0.75	0.78	6.97
28. PLASTICS & SYNTHETIC MATLS.	0.04	0.05	0.05	0.06	0.06	0.06	8.71
29. DRUGS,CLEANING & TOILET PREP.	0.13	0.13	0.14	0.15	0.15	0.16	3.94
30. PAINTS & ALLIED PRODUCTS	0.27	0.30	0.32	0.35	0.38	0.40	8.20
31. PET REFINING & REL. PROD.	0.11	0.12	0.12	0.13	0.14	0.14	5.59
32. RUBBER & MISC. PLASTICS PROD.	0.30	0.34	0.38	0.43	0.47	0.50	11.06
34. FOOTWEAR & OTHER LEATHER PROD.	0.01	0.01	0.01	0.01	0.01	0.01	6.19
35. GLASS & GLASS PRODUCTS	0.05	0.06	0.06	0.07	0.08	0.08	11.16
36. STONE & CLAY PRODUCTS	0.29	0.34	0.36	0.40	0.43	0.45	9.00
37. PRIMARY FERROUS METALS	0.25	0.27	0.30	0.32	0.34	0.36	7.95
38. NONFERROUS METALS	0.30	0.35	0.38	0.42	0.45	0.47	9.25
39. METAL CONTAINERS	0.01	0.01	0.01	0.01	0.01	0.01	6.60
40. FAB. STRUCTURAL METAL PRODUCTS	0.67	0.75	0.81	0.87	0.92	0.98	7.88
41. SCREW MACHINE PROD.&STAMPINGS	0.24	0.27	0.29	0.31	0.33	0.35	7.73
42. OTHER FAB. METAL PRODUCTS	0.33	0.38	0.42	0.46	0.51	0.54	10.49
43. ENGINES & TURBINES	0.02	0.03	0.03	0.03	0.03	0.03	7.74
44. FARM & GARDEN MACHINERY	0.01	0.01	0.01	0.01	0.01	0.01	8.11

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
54. SALES WORKERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
45. CONSTR. & MINING MACHINERY	0.06	0.07	0.07	0.08	0.08	0.08	7.25
46. MATERIALS HANDLING MACH. & EQ.	0.10	0.12	0.13	0.14	0.15	0.16	9.12
47. METALWORKING MACH. & EQ.	0.33	0.38	0.41	0.46	0.49	0.51	9.36
48. SPECIAL INDUSTRY MACHINERY	0.04	0.04	0.05	0.06	0.06	0.07	12.06
49. GENERAL INDUSTRY MACHINERY	0.23	0.25	0.27	0.30	0.31	0.33	7.51
50. MISC. NONELECTRICAL MACH.	0.31	0.34	0.37	0.41	0.44	0.45	7.54
51. OFFICE,COMPUTING & ACCT. MACH.	0.15	0.18	0.21	0.23	0.24	0.26	10.76
52. SERVICE INDUSTRY MACHINES	0.07	0.08	0.09	0.10	0.11	0.13	13.37
53. ELECTRICAL MACHINERY	0.16	0.18	0.20	0.22	0.23	0.24	9.11
54. HOUSEHOLD APPLIANCES	0.01	0.01	0.01	0.01	0.01	0.01	9.51
55. ELECTRIC LIGHTING & WIRING EQ.	0.18	0.20	0.22	0.24	0.25	0.27	8.25
56. RADIO,TV, & COMMUNICATION EQ.	1.69	1.94	2.13	2.32	2.44	2.49	8.09
57. ELECTRONIC COMPONENTS & ACCESS.	0.70	0.83	0.94	1.05	1.14	1.20	11.37
58. MISC. ELECTRICAL MACH. & EQ.	0.06	0.07	0.08	0.09	0.10	0.10	9.57
59. MOTOR VEHICLES & EQUIPMENT	0.08	0.10	0.11	0.13	0.16	0.18	17.14
60. AIRCRAFT & PARTS	2.00	2.27	2.50	2.76	2.95	3.03	8.59
61. OTHER TRANSPORTATION EQ.	0.28	0.30	0.31	0.31	0.33	0.34	3.51
62. INSTRUMENTS & SUPPLIES	1.28	1.46	1.61	1.77	1.90	1.98	9.09
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.17	0.19	0.21	0.23	0.25	0.27	9.14
64. MISC. MANUFACTURING	0.12	0.13	0.14	0.15	0.16	0.16	4.90
65. TRANSPORTATION & WAREHOUSING	3.26	3.54	3.80	4.14	4.41	4.60	7.17
66. COMMUNICATION EXC. RADIO & TV	0.61	0.65	0.69	0.75	0.79	0.81	5.69
67. RADIO & TV BROADCASTING	0.49	0.56	0.62	0.69	0.75	0.79	10.18
68. UTILITIES	0.14	0.15	0.16	0.17	0.18	0.18	6.34
69. WHOLESALE & RETAIL TRADE	30.72	34.70	38.20	42.30	45.76	48.14	9.40
70. FINANCE & INSURANCE	2.85	3.22	3.54	3.93	4.25	4.45	9.35
71. REAL ESTATE & RENTAL	2.09	2.34	2.58	2.85	3.07	3.21	9.03
72. PERSONAL SERVICES EXC. AUTO.	1.47	1.66	1.80	1.98	2.12	2.23	8.66
73. BUSINESS SERVICES	4.33	4.84	5.29	5.81	6.20	6.42	8.17
74. EATING & DRINKING PLACES	1.01	1.15	1.28	1.42	1.54	1.60	9.76
75. AUTOMOBILE REPAIR & SERVICE	0.22	0.24	0.26	0.28	0.29	0.30	6.83
76. AMUSEMENTS	0.33	0.36	0.39	0.43	0.46	0.48	7.92
77. MISC. SERVICES	0.40	0.41	0.43	0.45	0.48	0.49	4.47
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	16.69	18.32	19.88	21.57	22.88	23.72	7.28
82. GOVERNMENT INDUSTRY	12.60	12.37	12.64	13.01	13.25	13.37	1.20
TOTAL, ALL INDUSTRIES	94.06	103.53	112.27	122.44	130.64	136.02	7.66

TOTAL EMPLOYMENT

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
54. SALES WORKERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
1. LIVESTOCK & PRODUCTS	3.23	3.26	3.21	3.15	3.13	3.10	-0.81
2. OTHER AGRICULTURAL PRODUCTS	23.40	23.49	23.60	23.52	23.47	23.44	0.03
4. AGR.,FORESTRY,&FISHERY SERV.	1.99	2.05	2.07	2.12	2.14	2.18	1.77
7. COAL MINING	0.23	0.24	0.25	0.26	0.27	0.27	3.42
8. CRUDE PETROLEUM & N. GAS	1.98	1.98	1.98	1.94	1.91	1.93	-0.57
9. STONE&CLAY MINING & QUARRYING	0.97	0.99	1.02	1.07	1.09	1.10	2.68
11. NEW CONSTRUCTION	39.55	40.54	41.51	42.97	44.16	44.92	2.58
13. ORDNANCE & ACCESSORIES	1.73	1.79	1.84	1.90	1.94	1.98	2.78
14. FOOD & KINDRED PRODUCTS	60.17	60.72	60.82	60.34	59.49	58.74	-0.48
16. FABRIC,YARN & THREAD MILLS	1.78	1.83	1.88	1.91	1.93	1.93	1.60
17. MISC. TEXTILE GOODS	2.55	2.64	2.75	2.85	2.89	2.92	2.77
18. APPAREL	16.24	16.54	17.09	17.58	17.77	17.95	2.02
19. MISC. FABRICATED TEXTILE PROD.	3.09	3.17	3.26	3.32	3.36	3.39	1.86
20. LUMBER & WOOD PRODUCTS	7.16	7.83	8.20	8.58	8.74	8.74	4.06
21. WOOD CONTAINERS	0.47	0.47	0.47	0.49	0.49	0.49	1.17
22. HOUSEHOLD FURNITURE	6.57	6.93	7.15	7.39	7.56	7.63	3.03
23. OTHER FURNITURE & FIXTURES	3.39	3.41	3.51	3.61	3.69	3.76	2.05
24. PAPER & ALLIED PRODUCTS	8.01	8.28	8.40	8.46	8.48	8.50	1.21
25. PAPERBOARD CONTAINERS & BOXES	6.89	7.11	7.31	7.48	7.60	7.68	2.20
26. PRINTING & PUBLISHING	80.98	81.70	82.70	83.69	84.38	85.01	0.97
27. CHEMICALS & PRODUCTS	11.51	11.65	11.76	11.80	11.80	11.80	0.49
28. PLASTICS & SYNTHETIC MATLS.	1.71	1.78	1.84	1.89	1.91	1.92	2.31
29. DRUGS,CLEANING & TOILET PREP.	36.28	36.45	36.93	37.31	37.25	37.28	0.55
30. PAINTS & ALLIED PRODUCTS	5.08	5.32	5.50	5.69	5.81	5.88	2.97
31. PET REFINING & REL. PROD.	2.03	2.04	2.06	2.08	2.09	2.10	0.64
32. RUBBER & MISC. PLASTICS PROD.	10.96	11.42	11.99	12.46	12.86	13.07	3.58
34. FOOTWEAR & OTHER LEATHER PROD.	2.77	2.80	2.83	2.85	2.85	2.86	0.64
35. GLASS & GLASS PRODUCTS	2.22	2.30	2.38	2.44	2.47	2.49	2.31
36. STONE & CLAY PRODUCTS	9.13	9.38	9.60	9.90	10.01	9.94	1.72
37. PRIMARY FERROUS METALS	3.44	3.55	3.66	3.71	3.73	3.72	1.58
38. NONFERROUS METALS	3.60	3.73	3.88	3.99	4.05	4.10	2.67
39. METAL CONTAINERS	0.70	0.69	0.69	0.70	0.71	0.71	0.35
40. FAB. STRUCTURAL METAL PRODUCTS	14.98	15.05	15.46	16.01	16.39	16.65	2.14
41. SCREW MACHINE PROD.&STAMPINGS	3.88	4.08	4.21	4.29	4.31	4.33	2.20
42. OTHER FAB. METAL PRODUCTS	7.09	7.37	7.75	8.05	8.28	8.53	3.75
43. ENGINES & TURBINES	0.28	0.29	0.30	0.30	0.30	0.31	1.80
44. FARM & GARDEN MACHINERY	2.19	2.24	2.36	2.39	2.42	2.45	2.27
45. CONSTR. & MINING MACHINERY	5.02	5.31	5.59	5.79	5.94	6.01	3.64
46. MATERIALS HANDLING MACH. & EQ.	1.80	1.85	1.96	2.05	2.10	2.15	3.62

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
54. SALES WORKERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
47. METALWORKING MACH. & EQ.	6.36	6.62	7.02	7.30	7.51	7.65	3.76
48. SPECIAL INDUSTRY MACHINERY	5.25	5.37	5.63	5.89	6.03	6.16	3.22
49. GENERAL INDUSTRY MACHINERY	5.18	5.31	5.56	5.71	5.80	5.90	2.62
50. MISC. NONELECTRICAL MACH.	2.72	2.79	2.91	2.98	3.01	3.04	2.23
51. OFFICE,COMPUTING & ACCT. MACH.	4.09	4.42	4.76	5.00	5.22	5.48	6.02
52. SERVICE INDUSTRY MACHINES	3.78	3.93	4.11	4.18	4.19	4.19	2.10
53. ELECTRICAL MACHINERY	3.17	3.23	3.37	3.45	3.49	3.51	2.06
54. HOUSEHOLD APPLIANCES	2.57	2.64	2.72	2.81	2.87	2.91	2.48
55. ELECTRIC LIGHTING & WIRING EQ.	3.74	3.77	3.87	3.96	4.02	4.07	1.70
56. RADIO,TV, & COMMUNICATION EQ.	4.00	4.09	4.22	4.29	4.33	4.40	1.95
57. ELECTRONIC COMPONENTS & ACCESS.	3.19	3.33	3.49	3.63	3.74	3.82	3.65
58. MISC. ELECTRICAL MACH. & EQ.	2.36	2.45	2.54	2.57	2.61	2.63	2.12
59. MOTOR VEHICLES & EQUIPMENT	4.26	4.46	4.61	4.68	4.73	4.76	2.23
60. AIRCRAFT & PARTS	4.01	4.17	4.29	4.42	4.43	4.43	2.00
61. OTHER TRANSPORTATION EQ.	0.97	1.00	1.04	1.07	1.07	1.08	2.10
62. INSTRUMENTS & SUPPLIES	11.04	11.32	11.87	12.43	12.85	13.16	3.59
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	3.99	4.07	4.27	4.48	4.66	4.80	3.75
64. MISC. MANUFACTURING	11.28	11.33	11.57	11.77	11.83	11.80	0.91
65. TRANSPORTATION & WAREHOUSING	76.63	80.59	84.50	88.86	91.71	93.99	4.17
66. COMMUNICATION EXC. RADIO & TV	24.77	25.08	25.81	26.21	26.94	27.30	1.97
67. RADIO & TV BROADCASTING	24.66	25.96	27.19	28.07	28.77	29.46	3.63
68. UTILITIES	6.31	6.34	6.36	6.38	6.41	6.43	0.38
69. WHOLESALE & RETAIL TRADE	5,020.74	5,171.13	5,321.48	5,447.26	5,543.75	5,644.58	2.37
70. FINANCE & INSURANCE	332.46	337.99	344.86	353.64	362.97	371.85	2.26
71. REAL ESTATE & RENTAL	75.85	78.00	80.45	82.77	84.68	86.30	2.61
72. PERSONAL SERVICES EXC. AUTO.	80.18	81.67	83.53	85.41	87.31	89.01	2.11
73. BUSINESS SERVICES	89.30	91.70	94.43	97.72	100.43	102.52	2.80
74. EATING & DRINKING PLACES	65.15	66.32	67.42	67.99	68.45	68.68	1.06
75. AUTOMOBILE REPAIR & SERVICE	15.00	15.22	15.30	15.31	15.34	15.42	0.55
76. AMUSEMENTS	33.60	33.89	34.67	35.32	36.03	36.67	1.76
77. MISC. SERVICES	61.22	62.29	63.53	65.22	67.15	69.28	2.51
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	1,079.12	1,109.35	1,140.42	1,167.44	1,188.57	1,209.69	2.31
82. GOVERNMENT INDUSTRY	36.80	36.83	37.29	38.06	38.84	39.47	1.41
TOTAL, ALL INDUSTRIES	7,499.81	7,709.90	7,925.86	8,113.58	8,260.45	8,407.23	2.31

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
55. CLERICAL WORKERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
1. LIVESTOCK & PRODUCTS	0.05	0.05	0.05	0.05	0.05	0.06	2.60
2. OTHER AGRICULTURAL PRODUCTS	0.09	0.09	0.09	0.10	0.10	0.10	3.33
3. FORESTRY & FISHERY PRODUCTS	0.03	0.03	0.03	0.04	0.04	0.04	5.65
4. AGR.,FORESTRY,&FISHERY SERV.	0.26	0.29	0.30	0.33	0.35	0.37	7.34
5. IRON ORE MINING	0.09	0.10	0.11	0.12	0.12	0.13	8.08
6. NONFERROUS METAL MINING	0.22	0.26	0.29	0.32	0.34	0.36	10.58
7. COAL MINING	0.32	0.37	0.40	0.44	0.48	0.51	9.45
8. CRUDE PETROLEUM & N. GAS	3.21	3.42	3.54	3.74	3.93	3.97	4.34
9. STONE&CLAY MINING & QUARRYING	0.27	0.30	0.33	0.37	0.40	0.43	9.95
10. CHEM&FERTILIZER MIN. MINING	0.03	0.03	0.03	0.04	0.04	0.04	7.92
11. NEW CONSTRUCTION	10.28	11.73	12.71	14.14	15.32	16.18	9.49
13. ORDNANCE & ACCESSORIES	18.09	20.53	22.46	24.35	25.78	26.84	8.21
14. FOOD & KINDRED PRODUCTS	1.10	1.20	1.26	1.34	1.39	1.43	5.30
15. TOBACCO MANUFACTURES	0.01	0.01	0.01	0.01	0.01	0.01	7.10
16. FABRIC,YARN & THREAD MILLS	0.36	0.39	0.41	0.43	0.46	0.47	5.23
17. MISC. TEXTILE GOODS	0.18	0.20	0.21	0.23	0.24	0.25	7.09
18. APPAREL	0.38	0.40	0.42	0.45	0.48	0.51	6.02
19. MISC. FABRICATED TEXTILE PROD.	0.64	0.68	0.71	0.75	0.78	0.81	4.81
20. LUMBER & WOOD PRODUCTS	0.66	0.75	0.81	0.89	0.98	1.04	9.67
21. WOOD CONTAINERS	0.12	0.14	0.15	0.17	0.18	0.19	9.80
22. HOUSEHOLD FURNITURE	0.15	0.16	0.17	0.18	0.18	0.18	3.84
23. OTHER FURNITURE & FIXTURES	0.28	0.30	0.31	0.32	0.34	0.36	4.67
24. PAPER & ALLIED PRODUCTS	0.83	0.92	1.00	1.07	1.13	1.17	6.97
25. PAPERBOARD CONTAINERS & BOXES	0.41	0.45	0.50	0.55	0.59	0.62	8.94
26. PRINTING & PUBLISHING	4.41	4.80	5.15	5.55	5.85	6.03	6.42
27. CHEMICALS & PRODUCTS	2.91	3.21	3.45	3.75	4.03	4.22	7.71
28. PLASTICS & SYNTHETIC MATLS.	0.38	0.43	0.47	0.52	0.56	0.59	9.05
29. DRUGS,CLEANING & TOILET PREP.	0.24	0.26	0.27	0.29	0.30	0.30	4.54
30. PAINTS & ALLIED PRODUCTS	0.50	0.55	0.60	0.66	0.71	0.75	8.41
31. PET REFINING & REL. PROD.	1.16	1.23	1.30	1.39	1.46	1.50	5.17
32. RUBBER & MISC. PLASTICS PROD.	1.61	1.82	2.03	2.28	2.50	2.65	10.53
33. LEATHER TANNING & FINISHING	0.01	0.01	0.01	0.01	0.01	0.01	5.37
34. FOOTWEAR & OTHER LEATHER PROD.	0.04	0.05	0.05	0.05	0.05	0.06	5.80
35. GLASS & GLASS PRODUCTS	0.29	0.34	0.37	0.42	0.46	0.49	10.83
36. STONE & CLAY PRODUCTS	1.25	1.43	1.54	1.70	1.82	1.92	8.86
37. PRIMARY FERROUS METALS	3.27	3.63	3.92	4.27	4.54	4.73	7.68
38. NONFERROUS METALS	2.85	3.27	3.60	3.98	4.29	4.50	9.55

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
55. CLERICAL WORKERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
39. METAL CONTAINERS	0.07	0.07	0.08	0.08	0.09	0.09	6.60
40. FAB. STRUCTURAL METAL PRODUCTS	2.77	3.13	3.35	3.62	3.85	4.07	8.00
41. SCREW MACHINE PROD.&STAMPINGS	1.53	1.72	1.85	2.02	2.15	2.24	7.89
42. OTHER FAB. METAL PRODUCTS	1.81	2.08	2.28	2.53	2.75	2.91	9.88
43. ENGINES & TURBINES	0.97	1.10	1.20	1.28	1.35	1.42	7.93
44. FARM & GARDEN MACHINERY	0.04	0.05	0.05	0.06	0.06	0.07	8.49
45. CONSTR. & MINING MACHINERY	0.39	0.43	0.47	0.51	0.54	0.55	7.29
46. MATERIALS HANDLING MACH. & EQ.	0.67	0.77	0.84	0.92	0.99	1.04	9.17
47. METALWORKING MACH. & EQ.	1.85	2.12	2.34	2.59	2.79	2.91	9.56
48. SPECIAL INDUSTRY MACHINERY	0.17	0.19	0.21	0.25	0.28	0.30	12.28
49. GENERAL INDUSTRY MACHINERY	1.75	1.97	2.13	2.29	2.44	2.54	7.71
50. MISC. NONELECTRICAL MACH.	2.14	2.34	2.58	2.84	3.03	3.13	7.89
51. OFFICE,COMPUTING & ACCT. MACH.	2.39	2.74	2.98	3.21	3.35	3.45	7.58
52. SERVICE INDUSTRY MACHINES	0.37	0.43	0.48	0.55	0.62	0.70	13.60
53. ELECTRICAL MACHINERY	1.76	2.02	2.21	2.43	2.63	2.75	9.28
54. HOUSEHOLD APPLIANCES	0.03	0.03	0.04	0.04	0.04	0.05	9.71
55. ELECTRIC LIGHTING & WIRING EQ.	1.03	1.17	1.25	1.38	1.48	1.55	8.42
56. RADIO,TV, & COMMUNICATION EQ.	37.14	42.79	47.10	51.17	53.94	55.25	8.26
57. ELECTRONIC COMPONENTS & ACCESS.	10.08	12.02	13.55	15.19	16.60	17.42	11.56
58. MISC. ELECTRICAL MACH. & EQ.	0.42	0.49	0.53	0.59	0.64	0.68	9.80
59. MOTOR VEHICLES & EQUIPMENT	1.03	1.23	1.40	1.67	1.96	2.29	17.28
60. AIRCRAFT & PARTS	37.06	42.00	46.35	51.23	54.88	56.43	8.77
61. OTHER TRANSPORTATION EQ.	5.81	6.13	6.33	6.46	6.67	6.88	3.46
62. INSTRUMENTS & SUPPLIES	8.24	9.31	10.18	11.16	11.91	12.36	8.44
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	1.26	1.39	1.52	1.67	1.81	1.91	8.68
64. MISC. MANUFACTURING	0.55	0.60	0.63	0.68	0.72	0.74	6.12
65. TRANSPORTATION & WAREHOUSING	48.28	51.17	53.58	56.98	59.37	60.61	4.65
66. COMMUNICATION EXC. RADIO & TV	13.68	14.46	15.31	16.47	17.34	17.66	5.24
67. RADIO & TV BROADCASTING	0.66	0.74	0.81	0.89	0.94	0.99	8.58
68. UTILITIES	4.45	4.87	5.24	5.62	5.90	6.01	6.19
69. WHOLESALE & RETAIL TRADE	28.27	32.01	35.31	39.18	42.47	44.76	9.63
70. FINANCE & INSURANCE	21.55	24.37	26.90	29.86	32.35	33.91	9.49
71. REAL ESTATE & RENTAL	2.87	3.21	3.53	3.89	4.19	4.38	8.82
72. PERSONAL SERVICES EXC. AUTO.	9.07	10.15	10.99	11.97	12.74	13.32	7.99
73. BUSINESS SERVICES	34.93	39.53	43.69	48.53	52.37	54.79	9.42
74. EATING & DRINKING PLACES	4.31	5.00	5.64	6.33	6.92	7.30	11.14
75. AUTOMOBILE REPAIR & SERVICE	1.27	1.41	1.52	1.65	1.75	1.81	7.23
76. AMUSEMENTS	1.27	1.40	1.52	1.67	1.80	1.90	8.36
77. MISC. SERVICES	25.16	25.82	26.88	28.49	29.83	30.55	3.96

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
55. CLERICAL WORKERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	16.04	16.67	17.51	18.49	19.17	19.54	4.03
82. GOVERNMENT INDUSTRY	203.24	199.70	203.99	210.08	214.00	215.91	1.22
TOTAL, ALL INDUSTRIES	593.38	632.62	673.42	721.80	759.01	780.93	5.65
TOTAL EMPLOYMENT							
1. LIVESTOCK & PRODUCTS	8.03	8.10	7.98	7.83	7.78	7.71	-0.81
2. OTHER AGRICULTURAL PRODUCTS	58.85	59.40	60.01	60.12	60.32	60.56	0.58
3. FORESTRY & FISHERY PRODUCTS	1.18	1.24	1.31	1.36	1.36	1.34	2.70
4. AGR.,FORESTRY,&FISHERY SERV.	14.17	14.63	14.86	15.25	15.50	15.81	2.22
5. IRON ORE MINING	1.70	1.83	1.96	1.94	1.91	1.87	1.91
6. NONFERROUS METAL MINING	3.79	3.99	4.13	4.22	4.18	4.19	2.04
7. COAL MINING	11.51	12.15	12.65	13.02	13.49	13.83	3.74
8. CRUDE PETROLEUM & N. GAS	43.48	43.48	43.44	42.67	42.11	42.50	-0.45
9. STONE&CLAY MINING & QUARRYING	8.49	8.67	8.96	9.34	9.55	9.63	2.55
10. CHEM&FERTILIZER MIN. MINING	1.37	1.40	1.45	1.48	1.50	1.51	2.02
11. NEW CONSTRUCTION	273.70	281.83	289.87	301.37	310.92	317.45	3.01
13. ORDNANCE & ACCESSORIES	29.92	30.71	31.36	32.20	32.73	33.18	2.09
14. FOOD & KINDRED PRODUCTS	165.17	167.78	169.15	168.91	167.61	166.61	0.17
15. TOBACCO MANUFACTURES	6.96	6.96	6.87	6.75	6.67	6.55	-1.20
16. FABRIC,YARN & THREAD MILLS	29.17	30.07	30.91	31.55	31.87	31.95	1.83
17. MISC. TEXTILE GOODS	12.37	12.83	13.36	13.80	14.02	14.12	2.69
18. APPAREL	104.96	105.79	108.15	110.15	110.24	110.25	0.99
19. MISC. FABRICATED TEXTILE PROD.	21.66	22.24	22.87	23.34	23.65	23.90	1.99
20. LUMBER & WOOD PRODUCTS	31.79	34.66	36.23	37.83	38.46	38.35	3.82
21. WOOD CONTAINERS	2.02	2.02	2.06	2.11	2.13	2.14	1.14
22. HOUSEHOLD FURNITURE	25.62	27.06	27.99	28.97	29.64	29.95	3.18
23. OTHER FURNITURE & FIXTURES	17.85	17.99	18.56	19.13	19.54	19.95	2.25
24. PAPER & ALLIED PRODUCTS	44.79	46.26	46.89	47.19	47.28	47.35	1.12
25. PAPERBOARD CONTAINERS & BOXES	18.43	18.95	19.42	19.81	20.06	20.21	1.86
26. PRINTING & PUBLISHING	281.03	282.94	285.88	288.75	290.62	292.28	0.79
27. CHEMICALS & PRODUCTS	60.46	61.65	62.65	63.33	63.75	64.14	1.19
28. PLASTICS & SYNTHETIC MATLS.	15.81	16.44	17.10	17.59	17.88	18.00	2.64
29. DRUGS,CLEANING & TOILET PREP.	68.76	69.50	70.83	71.96	72.24	72.70	1.12
30. PAINTS & ALLIED PRODUCTS	9.49	9.96	10.33	10.71	10.95	11.10	3.17
31. PET REFINING & REL. PROD.	21.61	21.58	21.69	21.88	21.91	21.87	0.24
32. RUBBER & MISC. PLASTICS PROD.	59.05	61.19	63.91	66.12	67.94	68.75	3.09
33. LEATHER TANNING & FINISHING	1.16	1.20	1.24	1.24	1.24	1.24	1.28
34. FOOTWEAR & OTHER LEATHER PROD.	16.15	16.27	16.42	16.46	16.41	16.37	0.28

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
55. CLERICAL WORKERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
35. GLASS & GLASS PRODUCTS	13.34	13.79	14.24	14.55	14.69	14.74	2.01
36. STONE & CLAY PRODUCTS	38.84	39.83	40.71	41.92	42.33	42.01	1.58
37. PRIMARY FERROUS METALS	45.84	47.17	48.58	49.11	49.23	48.96	1.32
38. NONFERROUS METALS	33.66	34.98	36.48	37.62	38.30	38.92	2.94
39. METAL CONTAINERS	4.54	4.48	4.49	4.57	4.60	4.62	0.35
40. FAB. STRUCTURAL METAL PRODUCTS	62.07	62.44	64.20	66.58	68.22	69.35	2.25
41. SCREW MACHINE PROD.&STAMPINGS	24.99	26.32	27.22	27.73	27.92	28.08	2.36
42. OTHER FAB. METAL PRODUCTS	39.46	40.75	42.60	44.00	45.04	46.12	3.17
43. ENGINES & TURBINES	11.62	12.02	12.49	12.65	12.74	12.82	1.98
44. FARM & GARDEN MACHINERY	13.20	13.60	14.35	14.60	14.81	15.02	2.63
45. CONSTR. & MINING MACHINERY	32.93	34.83	36.67	37.98	39.02	39.47	3.69
46. MATERIALS HANDLING MACH. & EQ.	11.77	12.15	12.90	13.43	13.80	14.10	3.67
47. METALWORKING MACH. & EQ.	35.85	37.37	39.67	41.36	42.63	43.51	3.95
48. SPECIAL INDUSTRY MACHINERY	22.94	23.47	24.69	25.84	26.53	27.13	3.42
49. GENERAL INDUSTRY MACHINERY	39.98	41.05	43.06	44.29	45.11	45.91	2.81
50. MISC. NONELECTRICAL MACH.	18.70	19.26	20.14	20.67	20.92	21.23	2.57
51. OFFICE,COMPUTING & ACCT. MACH.	63.44	66.14	69.10	70.53	71.68	73.45	2.97
52. SERVICE INDUSTRY MACHINES	20.46	21.31	22.37	22.78	22.88	22.93	2.31
53. ELECTRICAL MACHINERY	35.43	36.10	37.79	38.71	39.19	39.52	2.21
54. HOUSEHOLD APPLIANCES	11.52	11.86	12.20	12.64	12.94	13.14	2.67
55. ELECTRIC LIGHTING & WIRING EQ.	21.60	21.79	22.42	22.99	23.37	23.69	1.86
56. RADIO,TV, & COMMUNICATION EQ.	87.95	90.15	93.12	94.88	95.88	97.61	2.11
57. ELECTRONIC COMPONENTS & ACCESS.	46.01	48.07	50.56	52.69	54.29	55.52	3.83
58. MISC. ELECTRICAL MACH. & EQ.	15.66	16.24	16.92	17.15	17.40	17.57	2.34
59. MOTOR VEHICLES & EQUIPMENT	53.43	55.93	57.89	58.89	59.60	60.00	2.35
60. AIRCRAFT & PARTS	74.23	77.33	79.58	82.22	82.55	82.63	2.17
61. OTHER TRANSPORTATION EQ.	20.04	20.65	21.40	21.89	21.96	22.17	2.04
62. INSTRUMENTS & SUPPLIES	70.81	72.19	75.19	78.27	80.48	81.96	2.97
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	29.14	29.59	30.89	32.29	33.40	34.29	3.31
64. MISC. MANUFACTURING	49.50	50.32	51.99	53.52	54.42	54.87	2.08
65. TRANSPORTATION & WAREHOUSING	1,135.81	1,164.47	1,191.31	1,223.47	1,234.12	1,237.13	1.72
66. COMMUNICATION EXC. RADIO & TV	551.21	555.72	569.45	575.66	589.29	594.90	1.54
67. RADIO & TV BROADCASTING	33.08	34.25	35.31	35.93	36.34	36.75	2.12
68. UTILITIES	206.74	207.38	207.87	208.26	208.86	209.12	0.23
69. WHOLESALE & RETAIL TRADE	4,620.60	4,769.65	4,918.88	5,045.58	5,145.20	5,248.87	2.58
70. FINANCE & INSURANCE	2,516.00	2,561.46	2,617.06	2,687.20	2,761.51	2,832.39	2.40
71. REAL ESTATE & RENTAL	104.20	106.92	110.05	113.02	115.43	117.45	2.42
72. PERSONAL SERVICES EXC. AUTO.	494.65	500.50	508.63	516.91	525.25	532.39	1.48
73. BUSINESS SERVICES	719.81	748.66	780.39	816.84	848.65	875.24	3.99

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
55. CLERICAL WORKERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
74. EATING & DRINKING PLACES	278.59	287.72	296.41	302.68	308.30	312.71	2.34
75. AUTOMOBILE REPAIR & SERVICE	87.90	89.58	90.36	90.77	91.29	92.04	0.92
76. AMUSEMENTS	130.23	131.95	135.53	138.64	141.99	145.04	2.18
77. MISC. SERVICES	3,896.86	3,944.18	4,002.52	4,089.37	4,190.63	4,304.19	2.01
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	358.48	365.53	373.85	382.60	390.40	397.77	2.10
82. GOVERNMENT INDUSTRY	2,077.94	2,068.05	2,082.05	2,111.65	2,141.17	2,168.53	0.86
TOTAL, ALL INDUSTRIES	19,741.72	20,128.22	20,584.40	21,063.70	21,490.25	21,893.76	2.09

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
56. COMPUTER&PERIPHERAL EQUIP. OPER.
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
6. NONFERROUS METAL MINING	0.01	0.01	0.01	0.01	0.01	0.01	10.52
8. CRUDE PETROLEUM & N. GAS	0.12	0.13	0.14	0.15	0.16	0.16	6.24
11. NEW CONSTRUCTION	0.06	0.06	0.07	0.07	0.08	0.08	8.35
13. ORDNANCE & ACCESSORIES	0.47	0.54	0.59	0.63	0.67	0.70	7.98
14. FOOD & KINDRED PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	5.32
16. FABRIC,YARN & THREAD MILLS	0.01	0.01	0.01	0.01	0.01	0.01	4.59
18. APPAREL	0.01	0.01	0.01	0.01	0.01	0.01	5.97
19. MISC. FABRICATED TEXTILE PROD.	0.01	0.01	0.01	0.01	0.01	0.01	4.69
20. LUMBER & WOOD PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	9.36
24. PAPER & ALLIED PRODUCTS	0.02	0.02	0.02	0.02	0.02	0.03	6.74
25. PAPERBOARD CONTAINERS & BOXES	0.01	0.01	0.01	0.01	0.01	0.01	8.79
26. PRINTING & PUBLISHING	0.08	0.08	0.09	0.10	0.10	0.10	6.35
27. CHEMICALS & PRODUCTS	0.06	0.06	0.07	0.07	0.08	0.08	7.61
28. PLASTICS & SYNTHETIC MATLS.	0.01	0.01	0.01	0.02	0.02	0.02	8.71
30. PAINTS & ALLIED PRODUCTS	0.01	0.01	0.02	0.02	0.02	0.02	8.22
31. PET REFINING & REL. PROD.	0.03	0.04	0.04	0.04	0.04	0.04	5.41
32. RUBBER & MISC. PLASTICS PROD.	0.03	0.04	0.04	0.05	0.05	0.06	10.31
35. GLASS & GLASS PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	10.97
36. STONE & CLAY PRODUCTS	0.02	0.02	0.03	0.03	0.03	0.03	8.13
37. PRIMARY FERROUS METALS	0.08	0.09	0.10	0.11	0.11	0.12	7.58
38. NONFERROUS METALS	0.05	0.06	0.06	0.07	0.08	0.08	9.68
40. FAB. STRUCTURAL METAL PRODUCTS	0.06	0.07	0.07	0.08	0.08	0.09	7.88
41. SCREW MACHINE PROD.&STAMPINGS	0.03	0.04	0.04	0.04	0.05	0.05	7.71
42. OTHER FAB. METAL PRODUCTS	0.04	0.04	0.04	0.05	0.05	0.06	9.93
43. ENGINES & TURBINES	0.02	0.02	0.02	0.02	0.03	0.03	7.74
45. CONSTR. & MINING MACHINERY	0.01	0.01	0.01	0.01	0.01	0.01	7.24
46. MATERIALS HANDLING MACH. & EQ.	0.01	0.01	0.01	0.02	0.02	0.02	9.11
47. METALWORKING MACH. & EQ.	0.04	0.04	0.05	0.05	0.05	0.06	9.37
49. GENERAL INDUSTRY MACHINERY	0.04	0.04	0.04	0.05	0.05	0.05	7.51
50. MISC. NONELECTRICAL MACH.	0.01	0.02	0.02	0.02	0.02	0.02	7.57
51. OFFICE,COMPUTING & ACCT. MACH.	0.13	0.15	0.17	0.18	0.19	0.20	9.14
52. SERVICE INDUSTRY MACHINES	0.01	0.01	0.01	0.01	0.01	0.01	13.39
53. ELECTRICAL MACHINERY	0.03	0.04	0.04	0.05	0.05	0.05	9.06
55. ELECTRIC LIGHTING & WIRING EQ.	0.03	0.03	0.03	0.04	0.04	0.04	8.27
56. RADIO,TV, & COMMUNICATION EQ.	1.08	1.25	1.37	1.49	1.57	1.61	8.18
57. ELECTRONIC COMPONENTS & ACCESS.	0.24	0.29	0.32	0.36	0.40	0.42	11.37
58. MISC. ELECTRICAL MACH. & EQ.	0.01	0.01	0.01	0.01	0.01	0.01	9.55

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
56. COMPUTER&PERIPHERAL EQUIP. OPER.
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
59. MOTOR VEHICLES & EQUIPMENT	0.03	0.03	0.04	0.04	0.05	0.06	17.13
60. AIRCRAFT & PARTS	0.84	0.95	1.05	1.16	1.24	1.27	8.60
61. OTHER TRANSPORTATION EQ.	0.09	0.09	0.10	0.10	0.10	0.10	3.47
62. INSTRUMENTS & SUPPLIES	0.15	0.17	0.19	0.20	0.22	0.23	8.23
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.03	0.03	0.04	0.04	0.04	0.04	8.49
64. MISC. MANUFACTURING	0.01	0.01	0.01	0.01	0.01	0.01	6.47
65. TRANSPORTATION & WAREHOUSING	0.29	0.30	0.32	0.34	0.35	0.36	4.70
66. COMMUNICATION EXC. RADIO & TV	0.16	0.17	0.18	0.19	0.20	0.21	5.40
67. RADIO & TV BROADCASTING	0.01	0.01	0.01	0.01	0.01	0.01	8.19
68. UTILITIES	0.07	0.07	0.08	0.08	0.09	0.09	6.03
69. WHOLESALE & RETAIL TRADE	0.10	0.11	0.12	0.13	0.14	0.15	9.19
70. FINANCE & INSURANCE	0.38	0.44	0.50	0.56	0.63	0.67	12.29
71. REAL ESTATE & RENTAL	0.01	0.02	0.02	0.02	0.02	0.02	9.15
72. PERSONAL SERVICES EXC. AUTO.	0.01	0.02	0.02	0.02	0.02	0.02	8.16
73. BUSINESS SERVICES	1.84	2.24	2.63	3.08	3.48	3.80	15.60
74. EATING & DRINKING PLACES	0.01	0.01	0.01	0.01	0.01	0.01	9.73
77. MISC. SERVICES	0.37	0.41	0.45	0.50	0.55	0.59	9.56
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.08	0.09	0.10	0.10	0.11	0.12	6.84
82. GOVERNMENT INDUSTRY	6.95	7.21	7.74	8.36	8.90	9.35	6.13
TOTAL, ALL INDUSTRIES	14.36	15.72	17.23	18.95	20.42	21.51	8.42
TOTAL EMPLOYMENT							
6. NONFERROUS METAL MINING	0.12	0.12	0.13	0.13	0.13	0.13	1.98
8. CRUDE PETROLEUM & N. GAS	1.63	1.67	1.70	1.70	1.70	1.75	1.36
11. NEW CONSTRUCTION	1.49	1.52	1.54	1.59	1.62	1.64	1.94
13. ORDNANCE & ACCESSORIES	0.78	0.80	0.82	0.84	0.85	0.86	1.87
14. FOOD & KINDRED PRODUCTS	1.54	1.56	1.57	1.57	1.56	1.55	0.19
16. FABRIC,YARN & THREAD MILLS	0.45	0.46	0.47	0.48	0.48	0.48	1.22
18. APPAREL	1.59	1.61	1.64	1.67	1.67	1.67	0.93
19. MISC. FABRICATED TEXTILE PROD.	0.28	0.29	0.30	0.30	0.31	0.31	1.87
20. LUMBER & WOOD PRODUCTS	0.38	0.41	0.43	0.45	0.45	0.45	3.52
24. PAPER & ALLIED PRODUCTS	0.98	1.01	1.03	1.03	1.03	1.03	0.90
25. PAPERBOARD CONTAINERS & BOXES	0.40	0.41	0.42	0.43	0.43	0.43	1.72
26. PRINTING & PUBLISHING	4.82	4.85	4.90	4.95	4.98	5.00	0.72
27. CHEMICALS & PRODUCTS	1.20	1.23	1.25	1.26	1.27	1.27	1.09
28. PLASTICS & SYNTHETIC MATLS.	0.49	0.51	0.53	0.54	0.55	0.55	2.31
30. PAINTS & ALLIED PRODUCTS	0.25	0.26	0.27	0.28	0.28	0.29	3.00
31. PET REFINING & REL. PROD.	0.63	0.63	0.63	0.64	0.64	0.64	0.46

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
56. COMPUTER&PERIPHERAL EQUIP. OPER.
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
32. RUBBER & MISC. PLASTICS PROD.	1.25	1.29	1.35	1.39	1.43	1.44	2.89
35. GLASS & GLASS PRODUCTS	0.27	0.28	0.29	0.30	0.30	0.30	2.14
36. STONE & CLAY PRODUCTS	0.66	0.67	0.69	0.70	0.70	0.69	0.91
37. PRIMARY FERROUS METALS	1.14	1.17	1.21	1.22	1.22	1.21	1.22
38. NONFERROUS METALS	0.60	0.63	0.66	0.68	0.69	0.70	3.07
40. FAB. STRUCTURAL METAL PRODUCTS	1.36	1.36	1.40	1.45	1.49	1.51	2.13
41. SCREW MACHINE PROD.&STAMPINGS	0.54	0.56	0.58	0.59	0.60	0.60	2.18
42. OTHER FAB. METAL PRODUCTS	0.77	0.80	0.83	0.86	0.88	0.90	3.21
43. ENGINES & TURBINES	0.23	0.23	0.24	0.24	0.25	0.25	1.80
45. CONSTR. & MINING MACHINERY	0.58	0.61	0.64	0.67	0.68	0.69	3.63
46. MATERIALS HANDLING MACH. & EQ.	0.21	0.21	0.23	0.24	0.24	0.25	3.61
47. METALWORKING MACH. & EQ.	0.70	0.73	0.77	0.80	0.82	0.84	3.77
49. GENERAL INDUSTRY MACHINERY	0.82	0.84	0.88	0.90	0.92	0.93	2.62
50. MISC. NONELECTRICAL MACH.	0.13	0.13	0.14	0.14	0.14	0.14	2.26
51. OFFICE,COMPUTING & ACCT. MACH.	3.43	3.63	3.86	3.99	4.11	4,26	4.47
52. SERVICE INDUSTRY MACHINES	0.35	0.37	0.38	0.39	0.39	0.39	2.13
53. ELECTRICAL MACHINERY	0.68	0.69	0.72	0.74	0.75	0.75	2.01
55. ELECTRIC LIGHTING & WIRING EQ.	0.55	0.55	0.57	0.59	0.60	0.60	1.72
56. RADIO,TV, & COMMUNICATION EQ.	2.57	2.63	2.71	2.76	2.79	2.84	2.02
57. ELECTRONIC COMPONENTS & ACCESS.	1.11	1.15	1.21	1.26	1.30	1.32	3.65
58. MISC. ELECTRICAL MACH. & EQ.	0.32	0.33	0.34	0.34	0.35	0.35	2.10
59. MOTOR VEHICLES & EQUIPMENT	1.37	1.43	1.48	1.50	1.52	1.53	2.22
60. AIRCRAFT & PARTS	1.68	1.75	1.80	1.86	1.86	1.86	2.00
61. OTHER TRANSPORTATION EQ.	0.30	0.31	0.32	0.33	0.33	0.34	2.06
62. INSTRUMENTS & SUPPLIES	1.30	1.33	1.38	1.43	1.47	1.50	2.77
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.69	0.69	0.72	0.76	0.78	0.80	3.13
64. MISC. MANUFACTURING	0.91	0.93	0.96	1.00	1.02	1.03	2.42
65. TRANSPORTATION & WAREHOUSING	6.74	6.92	7.08	7.28	7.34	7.36	1.77
66. COMMUNICATION EXC. RADIO & TV	6.46	6.52	6.70	6.78	6.95	7.03	1.69
67. RADIO & TV BROADCASTING	0.41	0.43	0.44	0.44	0.45	0.45	1.75
68. UTILITIES	3.10	3.11	3.11	3.11	3.12	3.12	0.08
69. WHOLESALE & RETAIL TRADE	15.90	16.35	16.79	17.15	17.42	17.71	2.17
70. FINANCE & INSURANCE	43.84	45.95	48.24	50.79	53.42	56.00	5.02
71. REAL ESTATE & RENTAL	0.49	0.51	0.52	0.54	0.55	0.56	2.73
72. PERSONAL SERVICES EXC. AUTO.	0.77	0.78	0.79	0.80	0.82	0.83	1.64
73. BUSINESS SERVICES	37.96	42.34	46.90	51.79	56.44	60.75	9.86
74. EATING & DRINKING PLACES	0.51	0.52	0.53	0.54	0.54	0.54	1.04
77. MISC. SERVICES	58.02	62.51	67.13	72.23	77.62	83.30	7.50
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.55	0.59	0.62	0.66	0.70	0.73	5.87

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
56. COMPUTER&PERIPHERAL EQUIP. OPER.
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
82. GOVERNMENT INDUSTRY	28.63	30.41	32.56	35.07	37.61	39.93	6.88
TOTAL, ALL INDUSTRIES	250.22	264.95	280.88	297.75	314.21	330.10	5.70

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
57. COMPUTER OPERATORS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
8. CRUDE PETROLEUM & N. GAS	0.09	0.10	0.11	0.12	0.13	0.13	6.69
11. NEW CONSTRUCTION	0.05	0.06	0.06	0.07	0.07	0.07	8.33
13. ORDNANCE & ACCESSORIES	0.39	0.44	0.48	0.52	0.54	0.57	8.00
14. FOOD & KINDRED PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	5.33
19. MISC. FABRICATED TEXTILE PROD.	0.01	0.01	0.01	0.01	0.01	0.01	4.68
20. LUMBER & WOOD PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	9.37
24. PAPER & ALLIED PRODUCTS	0.01	0.02	0.02	0.02	0.02	0.02	6.74
25. PAPERBOARD CONTAINERS & BOXES	0.01	0.01	0.01	0.01	0.01	0.01	8.76
26. PRINTING & PUBLISHING	0.06	0.06	0.07	0.07	0.07	0.08	6.30
27. CHEMICALS & PRODUCTS	0.05	0.05	0.06	0.06	0.07	0.07	7.49
28. PLASTICS & SYNTHETIC MATLS.	0.01	0.01	0.01	0.01	0.01	0.01	8.70
30. PAINTS & ALLIED PRODUCTS	0.01	0.01	0.01	0.01	0.02	0.02	8.18
31. PET REFINING & REL. PROD.	0.02	0.03	0.03	0.03	0.03	0.03	5.42
32. RUBBER & MISC. PLASTICS PROD.	0.03	0.03	0.03	0.04	0.04	0.04	10.33
36. STONE & CLAY PRODUCTS	0.02	0.02	0.02	0.02	0.02	0.02	8.14
37. PRIMARY FERROUS METALS	0.06	0.07	0.08	0.08	0.09	0.09	7.57
38. NONFERROUS METALS	0.04	0.05	0.05	0.06	0.06	0.06	9.65
40. FAB. STRUCTURAL METAL PRODUCTS	0.05	0.05	0.06	0.06	0.07	0.07	7.88
41. SCREW MACHINE PROD.&STAMPINGS	0.03	0.03	0.03	0.03	0.04	0.04	7.71
42. OTHER FAB. METAL PRODUCTS	0.03	0.03	0.03	0.04	0.04	0.04	9.92
43. ENGINES & TURBINES	0.01	0.01	0.02	0.02	0.02	0.02	7.71
45. CONSTR. & MINING MACHINERY	0.01	0.01	0.01	0.01	0.01	0.01	7.24
46. MATERIALS HANDLING MACH. & EQ.	0.01	0.01	0.01	0.01	0.02	0.02	9.11
47. METALWORKING MACH. & EQ.	0.03	0.04	0.04	0.04	0.05	0.05	9.37
49. GENERAL INDUSTRY MACHINERY	0.03	0.03	0.04	0.04	0.04	0.04	7.51
50. MISC. NONELECTRICAL MACH.	0.01	0.01	0.02	0.02	0.02	0.02	7.59
51. OFFICE,COMPUTING & ACCT. MACH.	0.11	0.13	0.15	0.16	0.17	0.18	9.37
53. ELECTRICAL MACHINERY	0.03	0.03	0.04	0.04	0.04	0.04	9.08
55. ELECTRIC LIGHTING & WIRING EQ.	0.02	0.03	0.03	0.03	0.03	0.04	8.26
56. RADIO,TV, & COMMUNICATION EQ.	0.82	0.94	1.04	1.13	1.19	1.22	8.18
57. ELECTRONIC COMPONENTS & ACCESS.	0.20	0.24	0.27	0.30	0.33	0.34	11.37
58. MISC. ELECTRICAL MACH. & EQ.	0.01	0.01	0.01	0.01	0.01	0.01	9.56
59. MOTOR VEHICLES & EQUIPMENT	0.02	0.03	0.03	0.04	0.04	0.05	17.13
60. AIRCRAFT & PARTS	0.46	0.53	0.58	0.64	0.68	0.70	8.60
61. OTHER TRANSPORTATION EQ.	0.06	0.06	0.07	0.07	0.07	0.07	3.47
62. INSTRUMENTS & SUPPLIES	0.12	0.14	0.15	0.17	0.18	0.18	8.27
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.03	0.03	0.03	0.04	0.04	0.04	8.50

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
57. COMPUTER OPERATORS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
64. MISC. MANUFACTURING	0.01	0.01	0.01	0.01	0.01	0.01	6.36
65. TRANSPORTATION & WAREHOUSING	0.18	0.20	0.21	0.22	0.23	0.24	5.26
66. COMMUNICATION EXC. RADIO & TV	0.13	0.14	0.15	0.16	0.17	0.17	5.39
67. RADIO & TV BROADCASTING	0.01	0.01	0.01	0.01	0.01	0.01	8.19
68. UTILITIES	0.05	0.05	0.06	0.06	0.06	0.07	6.04
69. WHOLESALE & RETAIL TRADE	0.07	0.08	0.09	0.10	0.11	0.12	9.03
70. FINANCE & INSURANCE	0.26	0.30	0.34	0.39	0.44	0.47	12.82
71. REAL ESTATE & RENTAL	0.01	0.01	0.01	0.01	0.01	0.01	9.15
72. PERSONAL SERVICES EXC. AUTO.	0.01	0.01	0.01	0.01	0.02	0.02	8.07
73. BUSINESS SERVICES	1.72	2.10	2.47	2.90	3.29	3.59	15.84
74. EATING & DRINKING PLACES	0.01	0.01	0.01	0.01	0.01	0.01	9.75
77. MISC. SERVICES	0.27	0.29	0.33	0.36	0.40	0.43	9.93
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.08	0.08	0.09	0.10	0.10	0.11	6.84
82. GOVERNMENT INDUSTRY	6.95	7.21	7.74	8.36	8.90	9.35	6.13
TOTAL, ALL INDUSTRIES	12.78	13.94	15.28	16.81	18.13	19.14	8.42

TOTAL EMPLOYMENT

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
8. CRUDE PETROLEUM & N. GAS	1.28	1.32	1.35	1.35	1.36	1.40	1.79
11. NEW CONSTRUCTION	1.33	1.36	1.38	1.42	1.45	1.47	1.92
13. ORDNANCE & ACCESSORIES	0.64	0.65	0.66	0.68	0.69	0.70	1.89
14. FOOD & KINDRED PRODUCTS	1.20	1.22	1.23	1.23	1.22	1.21	0.20
19. MISC. FABRICATED TEXTILE PROD.	0.22	0.22	0.23	0.24	0.24	0.24	1.86
20. LUMBER & WOOD PRODUCTS	0.29	0.32	0.33	0.35	0.35	0.35	3.53
24. PAPER & ALLIED PRODUCTS	0.77	0.79	0.80	0.80	0.80	0.80	0.90
25. PAPERBOARD CONTAINERS & BOXES	0.31	0.32	0.33	0.33	0.34	0.34	1.70
26. PRINTING & PUBLISHING	3.60	3.62	3.65	3.68	3.70	3.72	0.67
27. CHEMICALS & PRODUCTS	1.01	1.03	1.04	1.05	1.06	1.06	0.98
28. PLASTICS & SYNTHETIC MATLS.	0.39	0.41	0.42	0.43	0.44	0.44	2.30
30. PAINTS & ALLIED PRODUCTS	0.21	0.22	0.23	0.24	0.24	0.24	2.96
31. PET REFINING & REL. PROD.	0.45	0.45	0.45	0.46	0.46	0.46	0.47
32. RUBBER & MISC. PLASTICS PROD.	0.97	1.01	1.05	1.08	1.11	1.12	2.90
36. STONE & CLAY PRODUCTS	0.52	0.53	0.53	0.55	0.55	0.54	0.92
37. PRIMARY FERROUS METALS	0.89	0.91	0.94	0.95	0.95	0.94	1.22
38. NONFERROUS METALS	0.47	0.49	0.51	0.53	0.54	0.55	3.04
40. FAB. STRUCTURAL METAL PRODUCTS	1.06	1.06	1.09	1.13	1.16	1.17	2.13
41. SCREW MACHINE PROD.&STAMPINGS	0.42	0.44	0.45	0.46	0.46	0.47	2.18
42. OTHER FAB. METAL PRODUCTS	0.60	0.62	0.65	0.67	0.68	0.70	3.21
43. ENGINES & TURBINES	0.15	0.15	0.16	0.16	0.16	0.16	1.77

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
57. COMPUTER OPERATORS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
45. CONSTR. & MINING MACHINERY	0.51	0.54	0.56	0.58	0.60	0.61	3.64
46. MATERIALS HANDLING MACH. & EQ.	0.18	0.19	0.20	0.21	0.21	0.22	3.62
47. METALWORKING MACH. & EQ.	0.60	0.62	0.66	0.69	0.71	0.72	3.77
49. GENERAL INDUSTRY MACHINERY	0.67	0.69	0.72	0.74	0.75	0.76	2.61
50. MISC. NONELECTRICAL MACH.	0.11	0.12	0.12	0.12	0.12	0.13	2.28
51. OFFICE,COMPUTING & ACCT. MACH.	3.04	3.23	3.43	3.56	3.67	3.82	4.69
53. ELECTRICAL MACHINERY	0.57	0.58	0.61	0.62	0.63	0.63	2.03
55. ELECTRIC LIGHTING & WIRING EQ.	0.49	0.50	0.51	0.52	0.53	0.54	1.71
56. RADIO,TV, & COMMUNICATION EQ.	1.94	1.99	2.05	2.09	2.11	2.15	2.03
57. ELECTRONIC COMPONENTS & ACCESS.	0.91	0.95	1.00	1.04	1.07	1.09	3.65
58. MISC. ELECTRICAL MACH. & EQ.	0.27	0.28	0.29	0.29	0.30	0.30	2.11
59. MOTOR VEHICLES & EQUIPMENT	1.14	1.19	1.24	1.25	1.27	1.28	2.22
60. AIRCRAFT & PARTS	0.93	0.97	0.99	1.03	1.03	1.03	2.00
61. OTHER TRANSPORTATION EQ.	0.21	0.22	0.23	0.23	0.23	0.23	2.06
62. INSTRUMENTS & SUPPLIES	1.06	1.08	1.13	1.17	1.20	1.22	2.81
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.61	0.62	0.65	0.68	0.70	0.72	3.14
64. MISC. MANUFACTURING	0.74	0.75	0.78	0.80	0.82	0.83	2.31
65. TRANSPORTATION & WAREHOUSING	4.34	4.47	4.60	4.75	4.82	4.86	2.31
66. COMMUNICATION EXC. RADIO & TV	5.31	5.36	5.50	5.57	5.71	5.77	1.68
67. RADIO & TV BROADCASTING	0.33	0.34	0.35	0.35	0.35	0.36	1.76
68. UTILITIES	2.26	2.27	2.27	2.27	2.27	2.27	0.09
69. WHOLESALE & RETAIL TRADE	12.22	12.54	12.86	13.12	13.31	13.51	2.03
70. FINANCE & INSURANCE	30.17	31.80	33.55	35.49	37.49	39.45	5.51
71. REAL ESTATE & RENTAL	0.33	0.34	0.36	0.37	0.38	0.38	2.73
72. PERSONAL SERVICES EXC. AUTO.	0.62	0.63	0.64	0.65	0.66	0.67	1.56
73. BUSINESS SERVICES	35.51	39.71	44.10	48.80	53.26	57.41	10.09
74. EATING & DRINKING PLACES	0.46	0.47	0.48	0.48	0.49	0.49	1.06
77. MISC. SERVICES	41.57	44.99	48.50	52.36	56.43	60.70	7.87
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.43	0.46	0.49	0.52	0.55	0.59	6.21
82. GOVERNMENT INDUSTRY	28.63	30.41	32.56	35.07	37.61	39.93	6.88
TOTAL, ALL INDUSTRIES	199.30	211.89	225.54	239.97	254.06	267.59	6.07

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
58. PERIPHERAL EDP EQUIP. OPERATORS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
8. CRUDE PETROLEUM & N. GAS	0.03	0.03	0.03	0.03	0.03	0.03	4.52
11. NEW CONSTRUCTION	0.01	0.01	0.01	0.01	0.01	0.01	8.55
13. ORDNANCE & ACCESSORIES	0.09	0.10	0.11	0.12	0.12	0.13	7.93
26. PRINTING & PUBLISHING	0.02	0.02	0.02	0.02	0.03	0.03	6.52
27. CHEMICALS & PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	8.22
31. PET REFINING & REL. PROD.	0.01	0.01	0.01	0.01	0.01	0.01	5.39
32. RUBBER & MISC. PLASTICS PROD.	0.01	0.01	0.01	0.01	0.01	0.01	10.25
37. PRIMARY FERROUS METALS	0.02	0.02	0.02	0.02	0.02	0.03	7.59
38. NONFERROUS METALS	0.01	0.01	0.01	0.02	0.02	0.02	9.80
40. FAB. STRUCTURAL METAL PRODUCTS	0.01	0.02	0.02	0.02	0.02	0.02	7.86
41. SCREW MACHINE PROD.&STAMPINGS	0.01	0.01	0.01	0.01	0.01	0.01	7.70
42. OTHER FAB. METAL PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	9.94
43. ENGINES & TURBINES	0.01	0.01	0.01	0.01	0.01	0.01	7.81
49. GENERAL INDUSTRY MACHINERY	0.01	0.01	0.01	0.01	0.01	0.01	7.52
51. OFFICE,COMPUTING & ACCT. MACH.	0.01	0.02	0.02	0.02	0.02	0.02	7.31
56. RADIO,TV, & COMMUNICATION EQ.	0.26	0.30	0.33	0.36	0.38	0.39	8.15
57. ELECTRONIC COMPONENTS & ACCESS.	0.04	0.05	0.06	0.06	0.07	0.07	11.36
60. AIRCRAFT & PARTS	0.38	0.42	0.47	0.52	0.55	0.57	8.59
61. OTHER TRANSPORTATION EQ.	0.03	0.03	0.03	0.03	0.03	0.03	3.48
62. INSTRUMENTS & SUPPLIES	0.03	0.03	0.03	0.04	0.04	0.04	8.04
65. TRANSPORTATION & WAREHOUSING	0.10	0.11	0.11	0.12	0.12	0.12	3.67
66. COMMUNICATION EXC. RADIO & TV	0.03	0.03	0.03	0.03	0.04	0.04	5.46
68. UTILITIES	0.02	0.02	0.02	0.02	0.02	0.02	6.00
69. WHOLESALE & RETAIL TRADE	0.02	0.03	0.03	0.03	0.03	0.04	9.70
70. FINANCE & INSURANCE	0.12	0.13	0.15	0.17	0.19	0.20	11.09
73. BUSINESS SERVICES	0.12	0.14	0.16	0.18	0.20	0.21	11.88
77. MISC. SERVICES	0.11	0.11	0.13	0.14	0.15	0.16	8.59
TOTAL, ALL INDUSTRIES	1.58	1.78	1.95	2.13	2.28	2.37	8.45
TOTAL EMPLOYMENT							
8. CRUDE PETROLEUM & N. GAS	0.35	0.35	0.35	0.34	0.34	0.34	-0.28
11. NEW CONSTRUCTION	0.16	0.16	0.16	0.17	0.17	0.17	2.13
13. ORDNANCE & ACCESSORIES	0.15	0.15	0.15	0.16	0.16	0.16	1.82
26. PRINTING & PUBLISHING	1.23	1.24	1.25	1.27	1.28	1.28	0.88
27. CHEMICALS & PRODUCTS	0.19	0.20	0.20	0.21	0.21	0.21	1.67
31. PET REFINING & REL. PROD.	0.18	0.18	0.18	0.18	0.18	0.18	0.44

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
58. PERIPHERAL EDP EQUIP. OPERATORS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
32. RUBBER & MISC. PLASTICS PROD.	0.28	0.29	0.30	0.31	0.31	0.32	2.83
37. PRIMARY FERROUS METALS	0.25	0.26	0.27	0.27	0.27	0.27	1.24
38. NONFERROUS METALS	0.13	0.14	0.14	0.15	0.15	0.15	3.18
40. FAB. STRUCTURAL METAL PRODUCTS	0.30	0.30	0.31	0.32	0.33	0.33	2.11
41. SCREW MACHINE PROD.&STAMPINGS	0.12	0.13	0.13	0.13	0.13	0.13	2.17
42. OTHER FAB. METAL PRODUCTS	0.17	0.18	0.18	0.19	0.20	0.20	3.22
43. ENGINES & TURBINES	0.08	0.08	0.08	0.09	0.09	0.09	1.87
49. GENERAL INDUSTRY MACHINERY	0.15	0.15	0.16	0.16	0.16	0.17	2.63
51. OFFICE,COMPUTING & ACCT. MACH.	0.39	0.41	0.42	0.43	0.44	0.45	2.71
56. RADIO,TV, & COMMUNICATION EQ.	0.62	0.64	0.66	0.67	0.68	0.69	2.00
57. ELECTRONIC COMPONENTS & ACCESS.	0.19	0.20	0.21	0.22	0.23	0.23	3.64
60. AIRCRAFT & PARTS	0.75	0.78	0.80	0.83	0.83	0.83	1.99
61. OTHER TRANSPORTATION EQ.	0.09	0.10	0.10	0.10	0.10	0.10	2.07
62. INSTRUMENTS & SUPPLIES	0.24	0.24	0.25	0.26	0.27	0.27	2.59
65. TRANSPORTATION & WAREHOUSING	2.41	2.45	2.48	2.52	2.52	2.50	0.77
66. COMMUNICATION EXC. RADIO & TV	1.15	1.16	1.19	1.21	1.24	1.26	1.74
68. UTILITIES	0.84	0.84	0.84	0.84	0.84	0.84	0.05
69. WHOLESALE & RETAIL TRADE	3.68	3.80	3.92	4.03	4.11	4.19	2.65
70. FINANCE & INSURANCE	13.67	14.15	14.68	15.30	15.94	16.56	3.90
73. BUSINESS SERVICES	2.46	2.62	2.80	3.00	3.18	3.34	6.32
77. MISC. SERVICES	16.45	17.52	18.63	19.88	21.20	22.59	6.55
TOTAL, ALL INDUSTRIES	50.92	53.05	55.34	57.77	60.15	62.50	4.18

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
59. SECRETARIES&OFFICE MACH. OPS NEC
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
1. LIVESTOCK & PRODUCTS	0.02	0.02	0.02	0.02	0.02	0.02	2.60
2. OTHER AGRICULTURAL PRODUCTS	0.04	0.04	0.04	0.04	0.04	0.04	4.10
3. FORESTRY & FISHERY PRODUCTS	0.01	0.01	0.01	0.02	0.02	0.02	5.67
4. AGR.,FORESTRY,&FISHERY SERV.	0.09	0.10	0.11	0.12	0.13	0.14	8.17
5. IRON ORE MINING	0.02	0.03	0.03	0.03	0.03	0.04	8.39
6. NONFERROUS METAL MINING	0.08	0.09	0.10	0.11	0.12	0.12	10.46
7. COAL MINING	0.08	0.10	0.11	0.12	0.13	0.14	10.20
8. CRUDE PETROLEUM & N. GAS	1.10	1.18	1.23	1.31	1.39	1.41	5.20
9. STONE&CLAY MINING & QUARRYING	0.04	0.05	0.05	0.06	0.06	0.07	10.11
10. CHEM&FERTILIZER MIN. MINING	0.01	0.01	0.01	0.01	0.01	0.01	7.89
11. NEW CONSTRUCTION	3.30	3.80	4.15	4.65	5.08	5.40	10.34
13. ORDNANCE & ACCESSORIES	6.11	6.97	7.66	8.34	8.87	9.27	8.71
14. FOOD & KINDRED PRODUCTS	0.18	0.20	0.21	0.23	0.24	0.25	6.40
16. FABRIC,YARN & THREAD MILLS	0.06	0.06	0.06	0.07	0.07	0.07	5.10
17. MISC. TEXTILE GOODS	0.03	0.04	0.04	0.04	0.04	0.05	7.41
18. APPAREL	0.04	0.05	0.05	0.05	0.06	0.06	6.56
19. MISC. FABRICATED TEXTILE PROD.	0.08	0.09	0.09	0.10	0.11	0.11	5.59
20. LUMBER & WOOD PRODUCTS	0.13	0.15	0.16	0.18	0.20	0.21	10.51
21. WOOD CONTAINERS	0.03	0.03	0.03	0.04	0.04	0.04	9.78
22. HOUSEHOLD FURNITURE	0.03	0.03	0.03	0.03	0.04	0.04	4.46
23. OTHER FURNITURE & FIXTURES	0.06	0.06	0.06	0.07	0.07	0.07	4.94
24. PAPER & ALLIED PRODUCTS	0.22	0.24	0.26	0.28	0.30	0.31	7.33
25. PAPERBOARD CONTAINERS & BOXES	0.07	0.08	0.09	0.10	0.11	0.11	9.64
26. PRINTING & PUBLISHING	1.06	1.15	1.24	1.35	1.42	1.47	6.82
27. CHEMICALS & PRODUCTS	1.06	1.18	1.27	1.38	1.49	1.57	8.12
28. PLASTICS & SYNTHETIC MATLS.	0.15	0.16	0.18	0.20	0.22	0.23	9.42
29. DRUGS,CLEANING & TOILET PREP.	0.08	0.09	0.09	0.10	0.10	0.11	5.04
30. PAINTS & ALLIED PRODUCTS	0.12	0.14	0.15	0.16	0.17	0.18	8.53
31. PET REFINING & REL. PROD.	0.40	0.42	0.45	0.48	0.51	0.52	5.30
32. RUBBER & MISC. PLASTICS PROD.	0.37	0.42	0.47	0.53	0.58	0.61	10.79
34. FOOTWEAR & OTHER LEATHER PROD.	0.01	0.01	0.01	0.01	0.01	0.01	5.27
35. GLASS & GLASS PRODUCTS	0.07	0.08	0.09	0.10	0.10	0.11	10.47
36. STONE & CLAY PRODUCTS	0.26	0.30	0.33	0.36	0.39	0.41	9.36
37. PRIMARY FERROUS METALS	0.63	0.70	0.76	0.83	0.89	0.93	8.18
38. NONFERROUS METALS	0.69	0.79	0.88	0.98	1.06	1.12	10.20
39. METAL CONTAINERS	0.01	0.02	0.02	0.02	0.02	0.02	6.60
40. FAB. STRUCTURAL METAL PRODUCTS	0.73	0.83	0.89	0.97	1.04	1.10	8.62

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
59. SECRETARIES&OFFICE MACH. OPS NEC
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
41. SCREW MACHINE PROD.&STAMPINGS	0.31	0.35	0.38	0.41	0.44	0.46	8.61
42. OTHER FAB. METAL PRODUCTS	0.42	0.49	0.54	0.60	0.65	0.69	10.20
43. ENGINES & TURBINES	0.29	0.33	0.36	0.38	0.41	0.43	8.44
44. FARM & GARDEN MACHINERY	0.01	0.01	0.01	0.01	0.02	0.02	8.06
45. CONSTR. & MINING MACHINERY	0.10	0.11	0.12	0.13	0.14	0.14	7.42
46. MATERIALS HANDLING MACH. & EQ.	0.17	0.20	0.22	0.24	0.26	0.27	9.30
47. METALWORKING MACH. & EQ.	0.50	0.57	0.64	0.71	0.77	0.80	10.10
48. SPECIAL INDUSTRY MACHINERY	0.04	0.05	0.06	0.07	0.08	0.08	12.66
49. GENERAL INDUSTRY MACHINERY	0.45	0.51	0.55	0.59	0.63	0.66	7.82
50. MISC. NONELECTRICAL MACH.	0.58	0.64	0.71	0.79	0.84	0.88	8.83
51. OFFICE,COMPUTING & ACCT. MACH.	0.78	0.90	0.98	1.06	1.10	1.14	7.82
52. SERVICE INDUSTRY MACHINES	0.09	0.11	0.12	0.14	0.16	0.18	14.27
53. ELECTRICAL MACHINERY	0.45	0.52	0.57	0.63	0.68	0.71	9.44
54. HOUSEHOLD APPLIANCES	0.01	0.01	0.01	0.01	0.01	0.01	10.27
55. ELECTRIC LIGHTING & WIRING EQ.	0.22	0.25	0.27	0.30	0.32	0.34	8.38
56. RADIO,TV, & COMMUNICATION EQ.	11.67	13.52	14.97	16.36	17.34	17.85	8.88
57. ELECTRONIC COMPONENTS & ACCESS.	2.65	3.17	3.60	4.05	4.45	4.69	12.11
58. MISC. ELECTRICAL MACH. & EQ.	0.11	0.13	0.14	0.15	0.17	0.18	10.19
59. MOTOR VEHICLES & EQUIPMENT	0.21	0.25	0.28	0.34	0.40	0.47	17.60
60. AIRCRAFT & PARTS	10.84	12.34	13.67	15.17	16.32	16.84	9.21
61. OTHER TRANSPORTATION EQ.	1.32	1.40	1.45	1.48	1.53	1.58	3.69
62. INSTRUMENTS & SUPPLIES	2.49	2.82	3.10	3.41	3.65	3.80	8.85
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.36	0.40	0.43	0.48	0.52	0.55	9.10
64. MISC. MANUFACTURING	0.11	0.12	0.13	0.13	0.14	0.15	5.99
65. TRANSPORTATION & WAREHOUSING	3.77	4.04	4.27	4.58	4.82	4.97	5.68
66. COMMUNICATION EXC. RADIO & TV	1.18	1.25	1.33	1.43	1.51	1.55	5.60
67. RADIO & TV BROADCASTING	0.25	0.28	0.31	0.34	0.37	0.39	9.21
68. UTILITIES	0.84	0.92	0.99	1.07	1.13	1.15	6.56
69. WHOLESALE & RETAIL TRADE	3.03	3.42	3.77	4.19	4.54	4.78	9.57
70. FINANCE & INSURANCE	4.39	4.98	5.50	6.11	6.63	6.96	9.64
71. REAL ESTATE & RENTAL	0.93	1.06	1.19	1.32	1.44	1.52	10.29
72. PERSONAL SERVICES EXC. AUTO.	0.89	1.03	1.14	1.27	1.38	1.47	10.52
73. BUSINESS SERVICES	12.93	14.63	16.17	17.96	19.38	20.27	9.41
74. EATING & DRINKING PLACES	0.07	0.08	0.09	0.10	0.10	0.11	11.05
75. AUTOMOBILE REPAIR & SERVICE	0.14	0.16	0.17	0.19	0.20	0.21	8.08
76. AMUSEMENTS	0.14	0.16	0.18	0.19	0.21	0.22	9.07
77. MISC. SERVICES	10.24	10.50	10.93	11.58	12.12	12.41	3.92
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	4.93	5.07	5.29	5.55	5.72	5.81	3.34
82. GOVERNMENT INDUSTRY	76.93	75.28	76.59	78.56	79.72	80.12	0.82

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
59. SECRETARIES&OFFICE MACH. OPS NEC
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
TOTAL, ALL INDUSTRIES	172.31	181.74	192.64	205.58	215.47	221.27	5.13
TOTAL EMPLOYMENT							
1. LIVESTOCK & PRODUCTS	3.28	3.31	3.26	3.20	3.18	3.15	-0.81
2. OTHER AGRICULTURAL PRODUCTS	24.44	24.86	25.30	25.54	25.81	26.10	1.32
3. FORESTRY & FISHERY PRODUCTS	0.49	0.52	0.55	0.57	0.57	0.57	2.71
4. AGR.,FORESTRY,&FISHERY SERV.	5.10	5.31	5.44	5.62	5.76	5.91	3.01
5. IRON ORE MINING	0.47	0.50	0.54	0.54	0.53	0.52	2.20
6. NONFERROUS METAL MINING	1.29	1.36	1.40	1.43	1.42	1.42	1.93
7. COAL MINING	2.98	3.17	3.33	3.44	3.59	3.70	4.44
8. CRUDE PETROLEUM & N. GAS	14.86	14.99	15.10	14.96	14.88	15.14	0.37
9. STONE&CLAY MINING & QUARRYING	1.34	1.37	1.42	1.48	1.51	1.53	2.70
10. CHEM&FERTILIZER MIN. MINING	0.50	0.52	0.53	0.55	0.55	0.56	1.99
11. NEW CONSTRUCTION	87.83	91.25	94.63	99.15	103.04	105.91	3.82
13. ORDNANCE & ACCESSORIES	10.10	10.42	10.69	11.03	11.26	11.46	2.56
14. FOOD & KINDRED PRODUCTS	27.20	27.93	28.45	28.70	28.78	28.90	1.21
16. FABRIC,YARN & THREAD MILLS	4.56	4.70	4.82	4.92	4.96	4.97	1.71
17. MISC. TEXTILE GOODS	2.24	2.33	2.43	2.52	2.57	2.60	3.00
18. APPAREL	12.00	12.16	12.50	12.79	12.86	12.93	1.49
19. MISC. FABRICATED TEXTILE PROD.	2.83	2.93	3.04	3.12	3.19	3.24	2.74
20. LUMBER & WOOD PRODUCTS	6.25	6.87	7.24	7.62	7.80	7.83	4.62
21. WOOD CONTAINERS	0.43	0.43	0.44	0.45	0.45	0.45	1.12
22. HOUSEHOLD FURNITURE	4.89	5.20	5.42	5.64	5.80	5.89	3.79
23. OTHER FURNITURE & FIXTURES	3.71	3.75	3.88	4.00	4.10	4.20	2.51
24. PAPER & ALLIED PRODUCTS	11.68	12.11	12.32	12.44	12.50	12.56	1.46
25. PAPERBOARD CONTAINERS & BOXES	3.24	3.35	3.46	3.55	3.62	3.67	2.52
26. PRINTING & PUBLISHING	67.36	68.10	69.07	70.03	70.74	71.39	1.17
27. CHEMICALS & PRODUCTS	22.07	22.60	23.06	23.40	23.64	23.86	1.58
28. PLASTICS & SYNTHETIC MATLS.	6.06	6.33	6.60	6.81	6.95	7.02	2.98
29. DRUGS,CLEANING & TOILET PREP.	23.53	23.90	24.48	24.99	25.20	25.48	1.60
30. PAINTS & ALLIED PRODUCTS	2.31	2.43	2.52	2.62	2.68	2.72	3.29
31. PET REFINING & REL. PROD.	7.45	7.45	7.50	7.57	7.59	7.59	0.36
32. RUBBER & MISC. PLASTICS PROD.	13.49	14.02	14.67	15.22	15.67	15.89	3.33
34. FOOTWEAR & OTHER LEATHER PROD.	2.35	2.36	2.37	2.36	2.34	2.33	-0.23
35. GLASS & GLASS PRODUCTS	3.07	3.16	3.25	3.31	3.33	3.34	1.68
36. STONE & CLAY PRODUCTS	8.14	8.39	8.62	8.91	9.04	9.01	2.05
37. PRIMARY FERROUS METALS	8.77	9.07	9.39	9.54	9.60	9.59	1.79
38. NONFERROUS METALS	8.12	8.49	8.91	9.25	9.47	9.67	3.56

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
59. SECRETARIES&OFFICE MACH. OPS NEC
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
39. METAL CONTAINERS	1.01	1.00	1.00	1.02	1.02	1.03	0.35
40. FAB. STRUCTURAL METAL PRODUCTS	16.33	16.54	17.11	17.84	18.38	18.78	2.83
41. SCREW MACHINE PROD.&STAMPINGS	5.01	5.32	5.54	5.68	5.75	5.82	3.03
42. OTHER FAB. METAL PRODUCTS	9.20	9.53	10.00	10.35	10.63	10.91	3.47
43. ENGINES & TURBINES	3.44	3.57	3.73	3.79	3.84	3.88	2.46
44. FARM & GARDEN MACHINERY	3.25	3.34	3.51	3.56	3.59	3.63	2.22
45. CONSTR. & MINING MACHINERY	8.49	8.99	9.47	9.83	10.10	10.23	3.81
46. MATERIALS HANDLING MACH. & EQ.	3.03	3.14	3.33	3.47	3.57	3.65	3.79
47. METALWORKING MACH. & EQ.	9.66	10.13	10.80	11.32	11.72	12.02	4.46
48. SPECIAL INDUSTRY MACHINERY	6.15	6.32	6.67	7.01	7.22	7.41	3.77
49. GENERAL INDUSTRY MACHINERY	10.34	10.63	11.16	11.49	11.72	11.94	2.91
50. MISC. NONELECTRICAL MACH.	5.03	5.23	5.52	5.72	5.83	5.97	3.46
51. OFFICE,COMPUTING & ACCT. MACH.	20.73	21.67	22.69	23.21	23.64	24.27	3.21
52. SERVICE INDUSTRY MACHINES	5.18	5.44	5.74	5.88	5.94	5.99	2.92
53. ELECTRICAL MACHINERY	9.07	9.26	9.71	9.96	10.10	10.20	2.36
54. HOUSEHOLD APPLIANCES	3.03	3.14	3.25	3.38	3.48	3.55	3.19
55. ELECTRIC LIGHTING & WIRING EQ.	4.71	4.74	4.88	5.00	5.08	5.15	1.82
56. RADIO,TV, & COMMUNICATION EQ.	27.63	28.49	29.61	30.34	30.82	31.55	2.69
57. ELECTRONIC COMPONENTS & ACCESS.	12.09	12.69	13.42	14.05	14.55	14.94	4.34
58. MISC. ELECTRICAL MACH. & EQ.	4.07	4.23	4.42	4.50	4.58	4.64	2.70
59. MOTOR VEHICLES & EQUIPMENT	10.75	11.29	11.72	11.95	12.13	12.24	2.63
60. AIRCRAFT & PARTS	21.72	22.72	23.48	24.35	24.55	24.66	2.58
61. OTHER TRANSPORTATION EQ.	4.55	4.71	4.89	5.01	5.04	5.10	2.27
62. INSTRUMENTS & SUPPLIES	21.37	21.88	22.87	23.90	24.66	25.20	3.35
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	8.24	8.40	8.80	9.24	9.59	9.88	3.71
64. MISC. MANUFACTURING	9.85	9.99	10.31	10.60	10.77	10.85	1.95
65. TRANSPORTATION & WAREHOUSING	88.67	91.84	94.90	98.43	100.24	101.44	2.73
66. COMMUNICATION EXC. RADIO & TV	47.50	48.06	49.42	50.13	51.49	52.15	1.89
67. RADIO & TV BROADCASTING	12.51	13.04	13.52	13.84	14.07	14.30	2.71
68. UTILITIES	38.85	39.11	39.34	39.56	39.81	40.00	0.58
69. WHOLESALE & RETAIL TRADE	494.50	510.16	525.82	539.08	549.44	560.23	2.53
70. FINANCE & INSURANCE	512.89	522.97	535.12	550.24	566.22	581.50	2.54
71. REAL ESTATE & RENTAL	33.95	35.39	36.96	38.46	39.76	40.91	3.80
72. PERSONAL SERVICES EXC. AUTO.	48.72	50.58	52.66	54.77	56.88	58.87	3.86
73. BUSINESS SERVICES	266.46	277.11	288.83	302.29	314.03	323.85	3.98
74. EATING & DRINKING PLACES	4.23	4.37	4.50	4.59	4.67	4.73	2.26
75. AUTOMOBILE REPAIR & SERVICE	9.88	10.16	10.33	10.46	10.60	10.76	1.72
76. AMUSEMENTS	14.81	15.11	15.63	16.09	16.59	17.05	2.85
77. MISC. SERVICES	1,585.66	1,604.25	1,627.33	1,662.00	1,702.52	1,748.03	1.97

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
59. SECRETARIES&OFFICE MACH. OPS NEC
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	90.58	92.15	94.10	96.35	98.49	100.63	2.13
82. GOVERNMENT INDUSTRY	623.33	617.30	618.26	623.31	628.45	634.45	0.35
TOTAL, ALL INDUSTRIES	4,531.38	4,610.14	4,707.60	4,819.96	4,927.27	5,034.21	2.13

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE
BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
60. CLERICAL WORKERS NEC
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
1. LIVESTOCK & PRODUCTS	0.03	0.03	0.03	0.03	0.03	0.03	2.60
2. OTHER AGRICULTURAL PRODUCTS	0.05	0.05	0.05	0.06	0.06	0.06	2.77
3. FORESTRY & FISHERY PRODUCTS	0.02	0.02	0.02	0.02	0.02	0.02	5.61
4. AGR.,FORESTRY,&FISHERY SERV.	0.17	0.18	0.19	0.21	0.22	0.23	6.86
5. IRON ORE MINING	0.06	0.07	0.07	0.08	0.08	0.09	7.94
6. NONFERROUS METAL MINING	0.14	0.16	0.18	0.20	0.22	0.23	10.65
7. COAL MINING	0.24	0.27	0.29	0.32	0.35	0.36	9.19
8. CRUDE PETROLEUM & N. GAS	1.99	2.11	2.17	2.28	2.38	2.39	3.72
9. STONE&CLAY MINING & QUARRYING	0.22	0.25	0.27	0.31	0.34	0.36	9.92
10. CHEM&FERTILIZER MIN. MINING	0.02	0.02	0.02	0.02	0.02	0.02	7.93
11. NEW CONSTRUCTION	6.93	7.87	8.49	9.41	10.16	10.70	9.08
13. ORDNANCE & ACCESSORIES	11.51	13.03	14.21	15.38	16.24	16.87	7.95
14. FOOD & KINDRED PRODUCTS	0.91	0.99	1.04	1.10	1.14	1.17	5.08
15. TOBACCO MANUFACTURES	0.01	0.01	0.01	0.01	0.01	0.01	6.98
16. FABRIC,YARN & THREAD MILLS	0.30	0.32	0.34	0.36	0.38	0.39	5.27
17. MISC. TEXTILE GOODS	0.14	0.16	0.17	0.18	0.19	0.20	7.01
18. APPAREL	0.33	0.35	0.37	0.39	0.42	0.44	5.95
19. MISC. FABRICATED TEXTILE PROD.	0.55	0.58	0.60	0.64	0.66	0.69	4.70
20. LUMBER & WOOD PRODUCTS	0.52	0.59	0.64	0.70	0.77	0.82	9.46
21. WOOD CONTAINERS	0.09	0.11	0.12	0.13	0.14	0.15	9.81
22. HOUSEHOLD FURNITURE	0.12	0.13	0.14	0.14	0.14	0.14	3.70
23. OTHER FURNITURE & FIXTURES	0.22	0.23	0.24	0.25	0.26	0.27	4.60
24. PAPER & ALLIED PRODUCTS	0.60	0.66	0.71	0.76	0.81	0.83	6.84
25. PAPERBOARD CONTAINERS & BOXES	0.33	0.36	0.40	0.44	0.47	0.50	8.78
26. PRINTING & PUBLISHING	3.28	3.56	3.81	4.11	4.32	4.45	6.29
27. CHEMICALS & PRODUCTS	1.79	1.97	2.11	2.29	2.45	2.57	7.47
28. PLASTICS & SYNTHETIC MATLS.	0.22	0.25	0.28	0.30	0.33	0.34	8.83
29. DRUGS,CLEANING & TOILET PREP.	0.16	0.16	0.17	0.18	0.19	0.19	4.28
30. PAINTS & ALLIED PRODUCTS	0.36	0.40	0.44	0.48	0.52	0.55	8.37
31. PET REFINING & REL. PROD.	0.73	0.77	0.81	0.87	0.91	0.93	5.09
32. RUBBER & MISC. PLASTICS PROD.	1.21	1.37	1.52	1.71	1.87	1.98	10.46
34. FOOTWEAR & OTHER LEATHER PROD.	0.04	0.04	0.04	0.04	0.05	0.05	5.88
35. GLASS & GLASS PRODUCTS	0.22	0.25	0.28	0.31	0.34	0.37	10.94
36. STONE & CLAY PRODUCTS	0.97	1.11	1.19	1.31	1.40	1.47	8.73
37. PRIMARY FERROUS METALS	2.56	2.84	3.06	3.33	3.54	3.69	7.56
38. NONFERROUS METALS	2.11	2.42	2.66	2.93	3.15	3.30	9.33
39. METAL CONTAINERS	0.05	0.05	0.06	0.06	0.07	0.07	6.59

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
60. CLERICAL WORKERS NEC
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
40. FAB. STRUCTURAL METAL PRODUCTS	1.98	2.23	2.39	2.57	2.73	2.88	7.77
41. SCREW MACHINE PROD.&STAMPINGS	1.19	1.33	1.43	1.57	1.66	1.73	7.71
42. OTHER FAB. METAL PRODUCTS	1.36	1.55	1.70	1.89	2.05	2.16	9.78
43. ENGINES & TURBINES	0.66	0.75	0.82	0.87	0.92	0.96	7.72
44. FARM & GARDEN MACHINERY	0.03	0.04	0.04	0.04	0.05	0.05	8.65
45. CONSTR. & MINING MACHINERY	0.28	0.31	0.34	0.37	0.39	0.40	7.24
46. MATERIALS HANDLING MACH. & EQ.	0.48	0.56	0.61	0.67	0.72	0.75	9.12
47. METALWORKING MACH. & EQ.	1.31	1.51	1.65	1.83	1.97	2.05	9.36
48. SPECIAL INDUSTRY MACHINERY	0.12	0.14	0.15	0.18	0.20	0.21	12.14
49. GENERAL INDUSTRY MACHINERY	1.26	1.42	1.53	1.65	1.75	1.83	7.67
50. MISC. NONELECTRICAL MACH.	1.55	1.69	1.85	2.03	2.16	2.23	7.54
51. OFFICE,COMPUTING & ACCT. MACH.	1.48	1.69	1.84	1.97	2.05	2.11	7.31
52. SERVICE INDUSTRY MACHINES	0.27	0.31	0.35	0.40	0.45	0.51	13.37
53. ELECTRICAL MACHINERY	1.28	1.46	1.60	1.76	1.90	1.99	9.22
54. HOUSEHOLD APPLIANCES	0.02	0.02	0.03	0.03	0.03	0.03	9.50
55. ELECTRIC LIGHTING & WIRING EQ.	0.78	0.88	0.95	1.04	1.12	1.17	8.44
56. RADIO,TV, & COMMUNICATION EQ.	24.39	28.02	30.75	33.32	35.03	35.79	7.97
57. ELECTRONIC COMPONENTS & ACCESS.	7.19	8.55	9.63	10.77	11.75	12.32	11.37
58. MISC. ELECTRICAL MACH. & EQ.	0.31	0.35	0.38	0.42	0.46	0.48	9.67
59. MOTOR VEHICLES & EQUIPMENT	0.80	0.95	1.08	1.29	1.51	1.77	17.20
60. AIRCRAFT & PARTS	25.38	28.71	31.63	34.90	37.33	38.32	8.59
61. OTHER TRANSPORTATION EQ.	4.40	4.64	4.79	4.89	5.04	5.19	3.39
62. INSTRUMENTS & SUPPLIES	5.60	6.32	6.90	7.55	8.05	8.33	8.26
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.88	0.97	1.05	1.15	1.25	1.32	8.51
64. MISC. MANUFACTURING	0.43	0.47	0.50	0.53	0.56	0.58	6.15
65. TRANSPORTATION & WAREHOUSING	44.23	46.83	48.99	52.06	54.19	55.28	4.56
66. COMMUNICATION EXC. RADIO & TV	12.34	13.04	13.80	14.84	15.62	15.90	5.21
67. RADIO & TV BROADCASTING	0.40	0.45	0.49	0.53	0.57	0.59	8.19
68. UTILITIES	3.55	3.88	4.17	4.47	4.69	4.77	6.10
69. WHOLESALE & RETAIL TRADE	25.15	28.48	31.42	34.86	37.79	39.83	9.63
70. FINANCE & INSURANCE	16.78	18.95	20.90	23.18	25.09	26.28	9.38
71. REAL ESTATE & RENTAL	1.92	2.13	2.33	2.55	2.72	2.83	8.08
72. PERSONAL SERVICES EXC. AUTO.	8.16	9.11	9.83	10.68	11.34	11.83	7.70
73. BUSINESS SERVICES	20.16	22.66	24.90	27.49	29.51	30.71	8.79
74. EATING & DRINKING PLACES	4.23	4.92	5.54	6.23	6.80	7.18	11.15
75. AUTOMOBILE REPAIR & SERVICE	1.13	1.25	1.34	1.45	1.54	1.59	7.12
76. AMUSEMENTS	1.12	1.24	1.34	1.47	1.58	1.67	8.27
77. MISC. SERVICES	14.55	14.91	15.50	16.41	17.16	17.55	3.83
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	10.57	11.03	11.60	12.26	12.71	12.95	4.14

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
60. CLERICAL WORKERS NEC
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
82. GOVERNMENT INDUSTRY	119.37	117.22	119.66	123.16	125.39	126.43	1.16
TOTAL, ALL INDUSTRIES	406.26	434.69	463.02	496.70	522.50	537.48	5.76
TOTAL EMPLOYMENT							
1. LIVESTOCK & PRODUCTS	4.73	4.77	4.70	4.61	4.58	4.54	-0.81
2. OTHER AGRICULTURAL PRODUCTS	34.24	34.38	34.54	34.42	34.35	34.30	0.03
3. FORESTRY & FISHERY PRODUCTS	0.65	0.68	0.72	0.75	0.75	0.74	2.66
4. AGR.,FORESTRY,&FISHERY SERV.	8.98	9.23	9.33	9.53	9.65	9.80	1.76
5. IRON ORE MINING	1.16	1.25	1.33	1.32	1.29	1.27	1.77
6. NONFERROUS METAL MINING	2.38	2.51	2.60	2.66	2.64	2.64	2.10
7. COAL MINING	8.39	8.84	9.18	9.42	9.74	9.96	3.48
8. CRUDE PETROLEUM & N. GAS	26.98	26.83	26.64	26.02	25.53	25.61	-1.04
9. STONE&CLAY MINING & QUARRYING	7.09	7.24	7.48	7.79	7.96	8.03	2.52
10. CHEM&FERTILIZER MIN. MINING	0.85	0.87	0.90	0.92	0.93	0.93	2.03
11. NEW CONSTRUCTION	184.38	189.06	193.69	200.63	206.26	209.90	2.63
13. ORDNANCE & ACCESSORIES	19.04	19.49	19.85	20.33	20.62	20.86	1.84
14. FOOD & KINDRED PRODUCTS	136.42	138.29	139.12	138.63	137.28	136.17	-0.04
15. TOBACCO MANUFACTURES	5.23	5.23	5.15	5.06	5.00	4.90	-1.32
16. FABRIC,YARN & THREAD MILLS	24.16	24.91	25.61	26.15	26.42	26.50	1.87
17. MISC. TEXTILE GOODS	9.88	10.25	10.66	11.00	11.17	11.24	2.62
18. APPAREL	91.37	92.03	94.02	95.69	95.71	95.66	0.92
19. MISC. FABRICATED TEXTILE PROD.	18.55	19.02	19.54	19.91	20.15	20.35	1.87
20. LUMBER & WOOD PRODUCTS	25.16	27.38	28.56	29.77	30.20	30.06	3.62
21. WOOD CONTAINERS	1.59	1.58	1.61	1.65	1.67	1.68	1.15
22. HOUSEHOLD FURNITURE	20.24	21.35	22.05	22.79	23.28	23.50	3.03
23. OTHER FURNITURE & FIXTURES	13.82	13.92	14.35	14.78	15.08	15.39	2.18
24. PAPER & ALLIED PRODUCTS	32.12	33.13	33.55	33.72	33.75	33.76	1.00
25. PAPERBOARD CONTAINERS & BOXES	14.79	15.19	15.54	15.84	16.01	16.11	1.72
26. PRINTING & PUBLISHING	208.85	209.99	211.91	213.78	214.91	215.89	0.67
27. CHEMICALS & PRODUCTS	37.18	37.82	38.35	38.67	38.85	39.00	0.96
28. PLASTICS & SYNTHETIC MATLS.	9.26	9.61	9.97	10.24	10.39	10.44	2.43
29. DRUGS,CLEANING & TOILET PREP.	43.90	44.25	44.98	45.59	45.65	45.84	0.87
30. PAINTS & ALLIED PRODUCTS	6.93	7.27	7.54	7.81	7.99	8.09	3.14
31. PET REFINING & REL. PROD.	13.53	13.50	13.56	13.66	13.67	13.64	0.16
32. RUBBER & MISC. PLASTICS PROD.	44.31	45.88	47.89	49.51	50.84	51.42	3.02
34. FOOTWEAR & OTHER LEATHER PROD.	13.49	13.60	13.74	13.78	13.75	13.73	0.35
35. GLASS & GLASS PRODUCTS	10.00	10.34	10.69	10.94	11.05	11.10	2.10
36. STONE & CLAY PRODUCTS	30.03	30.77	31.41	32.31	32.58	32.31	1.47

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
60. CLERICAL WORKERS NEC
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
37. PRIMARY FERROUS METALS	35.93	36.93	37.99	38.36	38.41	38.16	1.21
38. NONFERROUS METALS	24.94	25.86	26.91	27.70	28.15	28.54	2.74
39. METAL CONTAINERS	3.45	3.40	3.40	3.46	3.49	3.51	0.34
40. FAB. STRUCTURAL METAL PRODUCTS	44.38	44.54	45.70	47.29	48.36	49.06	2.03
41. SCREW MACHINE PROD.&STAMPINGS	19.44	20.44	21.10	21.46	21.58	21.66	2.18
42. OTHER FAB. METAL PRODUCTS	29.49	30.42	31.77	32.78	33.53	34.31	3.07
43. ENGINES & TURBINES	7.96	8.22	8.52	8.61	8.66	8.69	1.78
44. FARM & GARDEN MACHINERY	9.54	9.85	10.41	10.61	10.78	10.94	2.78
45. CONSTR. & MINING MACHINERY	23.87	25.23	26.55	27.49	28.23	28.54	3.64
46. MATERIALS HANDLING MACH. & EQ.	8.53	8.80	9.34	9.72	9.99	10.19	3.62
47. METALWORKING MACH. & EQ.	25.49	26.52	28.10	29.24	30.08	30.65	3.76
48. SPECIAL INDUSTRY MACHINERY	16.38	16.74	17.58	18.38	18.85	19.25	3.29
49. GENERAL INDUSTRY MACHINERY	28.82	29.58	31.02	31.89	32.48	33.04	2.77
50. MISC. NONELECTRICAL MACH.	13.54	13.90	14.48	14.81	14.95	15.12	2.23
51. OFFICE,COMPUTING & ACCT. MACH.	39.29	40.84	42.56	43.32	43.93	44.92	2.72
52. SERVICE INDUSTRY MACHINES	14.92	15.51	16.25	16.51	16.55	16.55	2.10
53. ELECTRICAL MACHINERY	25.67	26.15	27.36	28.01	28.34	28.57	2.16
54. HOUSEHOLD APPLIANCES	8.16	8.38	8.61	8.90	9.10	9.22	2.48
55. ELECTRIC LIGHTING & WIRING EQ.	16.34	16.49	16.96	17.40	17.69	17.94	1.88
56. RADIO,TV, & COMMUNICATION EQ.	57.76	59.03	60.80	61.78	62.27	63.23	1.83
57. ELECTRONIC COMPONENTS & ACCESS.	32.82	34.22	35.93	37.38	38.45	39.26	3.65
58. MISC. ELECTRICAL MACH. & EQ.	11.28	11.68	12.15	12.30	12.47	12.58	2.21
59. MOTOR VEHICLES & EQUIPMENT	41.31	43.21	44.69	45.43	45.95	46.23	2.28
60. AIRCRAFT & PARTS	50.83	52.86	54.30	56.01	56.15	56.10	2.00
61. OTHER TRANSPORTATION EQ.	15.18	15.63	16.19	16.55	16.59	16.74	1.97
62. INSTRUMENTS & SUPPLIES	48.14	48.99	50.94	52.93	54.35	55.26	2.80
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	20.22	20.50	21.37	22.30	23.03	23.61	3.15
64. MISC. MANUFACTURING	38.75	39.39	40.72	41.92	42.63	43.00	2.10
65. TRANSPORTATION & WAREHOUSING	1,040.40	1,065.71	1,089.33	1,117.77	1,126.54	1,128.33	1.64
66. COMMUNICATION EXC. RADIO & TV	497.25	501.14	513.33	518.75	530.85	535.73	1.50
67. RADIO & TV BROADCASTING	20.16	20.79	21.35	21.65	21.82	22.00	1.76
68. UTILITIES	164.79	165.16	165.41	165.58	165.93	166.01	0.15
69. WHOLESALE & RETAIL TRADE	4,110.20	4,243.15	4,376.27	4,489.35	4,578.34	4,670.94	2.59
70. FINANCE & INSURANCE	1,959.27	1,992.53	2,033.70	2,086.17	2,141.86	2,194.88	2.30
71. REAL ESTATE & RENTAL	69.76	71.02	72.57	74.02	75.11	75.97	1.72
72. PERSONAL SERVICES EXC. AUTO.	445.16	449.14	455.18	461.34	467.55	472.69	1.21
73. BUSINESS SERVICES	415.39	429.22	444.67	462.76	478.18	490.64	3.39
74. EATING & DRINKING PLACES	273.84	282.83	291.38	297.55	303.09	307.44	2.34
75. AUTOMOBILE REPAIR & SERVICE	77.83	79.23	79.83	80.12	80.49	81.08	0.82

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
60. CLERICAL WORKERS NEC
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
76. AMUSEMENTS	115.09	116.50	119.57	122.21	125.05	127.65	2.09
77. MISC. SERVICES	2,253.19	2,277.42	2,308.06	2,355.14	2,410.48	2,472.86	1.88
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	266.29	271.55	277.70	283.98	289.43	294.48	2.03
82. GOVERNMENT INDUSTRY	1,431.78	1,429.04	1,442.97	1,468.30	1,493.53	1,515.84	1.15
TOTAL, ALL INDUSTRIES	14,964.86	15,260.59	15,606.23	15,959.40	16,265.42	16,549.22	2.03

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE
BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
61. CRAFT&RELATED WORKERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
1. LIVESTOCK & PRODUCTS	0.10	0.11	0.11	0.11	0.12	0.12	2.60
2. OTHER AGRICULTURAL PRODUCTS	0.18	0.18	0.19	0.20	0.20	0.21	2.66
3. FORESTRY & FISHERY PRODUCTS	0.05	0.05	0.05	0.06	0.06	0.06	5.85
4. AGR.,FORESTRY,&FISHERY SERV.	0.18	0.20	0.21	0.23	0.25	0.26	6.86
5. IRON ORE MINING	0.74	0.86	0.93	1.00	1.05	1.08	7.79
6. NONFERROUS METAL MINING	1.13	1.33	1.47	1.64	1.79	1.90	11.03
7. COAL MINING	2.44	2.78	3.06	3.35	3.66	3.84	9.46
8. CRUDE PETROLEUM & N. GAS	3.32	3.54	3.66	3.86	4.05	4.09	4.28
9. STONE&CLAY MINING & QUARRYING	0.82	0.93	1.01	1.14	1.24	1.32	9.96
10. CHEM&FERTILIZER MIN. MINING	0.13	0.15	0.16	0.18	0.19	0.20	7.91
11. NEW CONSTRUCTION	72.56	81.96	88.04	97.14	104.42	109.47	8.57
13. ORDNANCE & ACCESSORIES	24.74	27.97	30.48	32.93	34.74	36.05	7.82
14. FOOD & KINDRED PRODUCTS	1.44	1.56	1.64	1.74	1.81	1.85	5.23
15. TOBACCO MANUFACTURES	0.02	0.02	0.02	0.02	0.02	0.02	7.32
16. FABRIC,YARN & THREAD MILLS	0.94	1.00	1.05	1.11	1.15	1.18	4.69
17. MISC. TEXTILE GOODS	0.24	0.26	0.28	0.31	0.33	0.34	7.29
18. APPAREL	0.38	0.41	0.43	0.46	0.49	0.52	6.34
19. MISC. FABRICATED TEXTILE PROD.	0.44	0.46	0.48	0.51	0.52	0.54	4.43
20. LUMBER & WOOD PRODUCTS	2.17	2.46	2.66	2.90	3.16	3.35	9.06
21. WOOD CONTAINERS	0.23	0.26	0.29	0.32	0.34	0.36	9.81
22. HOUSEHOLD FURNITURE	0.39	0.42	0.45	0.47	0.48	0.47	3.70
23. OTHER FURNITURE & FIXTURES	0.49	0.51	0.53	0.56	0.59	0.61	4.71
24. PAPER & ALLIED PRODUCTS	1.91	2.09	2.26	2.43	2.55	2.63	6.68
25. PAPERBOARD CONTAINERS & BOXES	0.66	0.75	0.82	0.90	0.97	1.02	9.06
26. PRINTING & PUBLISHING	5.53	5.95	6.33	6.78	7.08	7.24	5.55
27. CHEMICALS & PRODUCTS	4.21	4.64	4.98	5.40	5.80	6.08	7.65
28. PLASTICS & SYNTHETIC MATLS.	0.98	1.09	1.21	1.33	1.43	1.49	8.81
29. DRUGS,CLEANING & TOILET PREP.	0.12	0.13	0.13	0.14	0.14	0.15	4.23
30. PAINTS & ALLIED PRODUCTS	0.24	0.27	0.29	0.32	0.34	0.36	8.24
31. PET REFINING & REL. PROD.	1.75	1.85	1.95	2.08	2.19	2.26	5.23
32. RUBBER & MISC. PLASTICS PROD.	3.00	3.39	3.77	4.22	4.62	4.88	10.25
33. LEATHER TANNING & FINISHING	0.01	0.01	0.01	0.01	0.01	0.01	5.35
34. FOOTWEAR & OTHER LEATHER PROD.	0.03	0.04	0.04	0.04	0.04	0.04	5.44
35. GLASS & GLASS PRODUCTS	0.73	0.81	0.89	0.98	1.06	1.12	9.03
36. STONE & CLAY PRODUCTS	2.41	2.75	2.95	3.25	3.48	3.65	8.59
37. PRIMARY FERROUS METALS	13.78	15.27	16.43	17.84	18.94	19.67	7.38
38. NONFERROUS METALS	7.88	9.03	9.93	10.95	11.80	12.35	9.42

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
61. CRAFT&RELATED WORKERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
39. METAL CONTAINERS	0.34	0.37	0.39	0.42	0.45	0.47	6.60
40. FAB. STRUCTURAL METAL PRODUCTS	5.97	6.70	7.14	7.66	8.11	8.53	7.40
41. SCREW MACHINE PROD.&STAMPINGS	5.29	5.93	6.38	6.97	7.41	7.72	7.84
42. OTHER FAB. METAL PRODUCTS	2.58	2.95	3.23	3.57	3.86	4.08	9.63
43. ENGINES & TURBINES	1.75	1.98	2.17	2.30	2.43	2.54	7.72
44. FARM & GARDEN MACHINERY	0.06	0.07	0.08	0.08	0.09	0.09	8.24
45. CONSTR. & MINING MACHINERY	0.48	0.54	0.58	0.63	0.66	0.68	7.18
46. MATERIALS HANDLING MACH. & EQ.	0.83	0.95	1.03	1.14	1.23	1.28	9.06
47. METALWORKING MACH. & EQ.	4.50	5.16	5.66	6.26	6.72	7.00	9.23
48. SPECIAL INDUSTRY MACHINERY	0.24	0.28	0.31	0.36	0.40	0.43	12.06
49. GENERAL INDUSTRY MACHINERY	2.36	2.65	2.85	3.07	3.26	3.40	7.51
50. MISC. NONELECTRICAL MACH.	4.75	5.18	5.70	6.27	6.67	6.89	7.70
51. OFFICE,COMPUTING & ACCT. MACH.	1.85	2.16	2.38	2.59	2.72	2.83	8.86
52. SERVICE INDUSTRY MACHINES	0.50	0.58	0.64	0.73	0.83	0.93	13.37
53. ELECTRICAL MACHINERY	2.45	2.80	3.07	3.37	3.63	3.79	9.15
54. HOUSEHOLD APPLIANCES	0.05	0.06	0.06	0.07	0.07	0.08	9.37
55. ELECTRIC LIGHTING & WIRING EQ.	1.46	1.64	1.76	1.93	2.07	2.16	8.25
56. RADIO,TV, & COMMUNICATION EQ.	31.73	36.25	39.58	42.66	44.63	45.37	7.41
57. ELECTRONIC COMPONENTS & ACCESS.	14.48	17.22	19.39	21.67	23.64	24.76	11.32
58. MISC. ELECTRICAL MACH. & EQ.	0.73	0.84	0.92	1.01	1.10	1.15	9.57
59. MOTOR VEHICLES & EQUIPMENT	3.47	4.14	4.70	5.58	6.54	7.65	17.15
60. AIRCRAFT & PARTS	56.72	64.06	70.47	77.63	82.90	84.97	8.42
61. OTHER TRANSPORTATION EQ.	25.52	26.91	27.78	28.35	29.25	30.15	3.39
62. INSTRUMENTS & SUPPLIES	7.15	8.06	8.80	9.64	10.27	10.64	8.29
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	1.66	1.83	2.00	2.21	2.39	2.53	8.82
64. MISC. MANUFACTURING	0.58	0.63	0.66	0.71	0.74	0.76	5.42
65. TRANSPORTATION & WAREHOUSING	16.66	17.59	18.36	19.46	20.20	20.55	4.30
66. COMMUNICATION EXC. RADIO & TV	9.96	10.52	11.13	11.97	12.59	12.81	5.17
67. RADIO & TV BROADCASTING	0.03	0.03	0.04	0.04	0.04	0.05	8.18
68. UTILITIES	6.57	7.17	7.70	8.25	8.66	8.79	6.01
69. WHOLESALE & RETAIL TRADE	9.84	11.21	12.44	13.88	15.13	16.03	10.26
70. FINANCE & INSURANCE	0.17	0.19	0.21	0.24	0.26	0.27	9.57
71. REAL ESTATE & RENTAL	1.86	2.04	2.20	2.38	2.52	2.59	6.86
72. PERSONAL SERVICES EXC. AUTO.	5.26	5.99	6.59	7.30	7.89	8.38	9.76
73. BUSINESS SERVICES	4.78	5.38	5.92	6.55	7.04	7.34	8.98
74. EATING & DRINKING PLACES	0.08	0.10	0.11	0.12	0.13	0.13	9.76
75. AUTOMOBILE REPAIR & SERVICE	3.19	3.52	3.78	4.09	4.34	4.47	7.01
76. AMUSEMENTS	0.54	0.59	0.64	0.70	0.75	0.79	7.96
77. MISC. SERVICES	2.74	2.83	2.95	3.14	3.30	3.39	4.29

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
61. CRAFT&RELATED WORKERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	79.55	83.10	87.17	91.81	94.84	96.41	3.92
82. GOVERNMENT INDUSTRY	189.86	186.25	189.81	195.01	198.15	199.44	0.99
TOTAL, ALL INDUSTRIES	664.96	711.91	755.98	808.72	849.06	873.15	5.60
TOTAL EMPLOYMENT							
1. LIVESTOCK & PRODUCTS	16.84	16.98	16.72	16.42	16.30	16.17	-0.81
2. OTHER AGRICULTURAL PRODUCTS	121.68	122.03	122.47	121.92	121.53	121.23	-0.07
3. FORESTRY & FISHERY PRODUCTS	1.87	1.97	2.10	2.19	2.19	2.16	2.90
4. AGR.,FORESTRY,&FISHERY SERV.	10.00	10.27	10.38	10.61	10.74	10.91	1.76
5. IRON ORE MINING	14.56	15.61	16.68	16.50	16.16	15.79	1.64
6. NONFERROUS METAL MINING	19.39	20.48	21.30	21.86	21.73	21.89	2.45
7. COAL MINING	87.28	92.15	95.98	98.72	102.33	104.87	3.74
8. CRUDE PETROLEUM & N. GAS	44.99	44.97	44.90	44.08	43.48	43.86	-0.51
9. STONE&CLAY MINING & QUARRYING	26.09	26.64	27.54	28.71	29.34	29.61	2.56
10. CHEM&FERTILIZER MIN. MINING	6.68	6.85	7.07	7.24	7.31	7.37	2.01
11. NEW CONSTRUCTION	1,930.95	1,969.88	2,008.26	2,070.62	2,119.39	2,147.66	2.15
13. ORDNANCE & ACCESSORIES	40.92	41.84	42.56	43.54	44.10	44.56	1.72
14. FOOD & KINDRED PRODUCTS	214.86	218.10	219.72	219.24	217.41	215.95	0.10
15. TOBACCO MANUFACTURES	13.35	13.37	13.23	13.04	12.91	12.70	-1.00
16. FABRIC,YARN & THREAD MILLS	75.48	77.39	79.14	80.37	80.76	80.54	1.31
17. MISC. TEXTILE GOODS	16.51	17.17	17.91	18.53	18.87	19.03	2.88
18. APPAREL	106.44	107.62	110.35	112.72	113.15	113.48	1.29
19. MISC. FABRICATED TEXTILE PROD.	14.76	15.09	15.46	15.72	15.87	15.99	1.61
20. LUMBER & WOOD PRODUCTS	105.10	113.91	118.38	122.93	124.29	123.27	3.24
21. WOOD CONTAINERS	3.82	3.82	3.89	3.99	4.03	4.05	1.16
22. HOUSEHOLD FURNITURE	67.81	71.52	73.86	76.33	78.00	78.72	3.03
23. OTHER FURNITURE & FIXTURES	30.69	30.95	31.94	32.93	33.65	34.36	2.29
24. PAPER & ALLIED PRODUCTS	102.44	105.50	106.65	107.04	106.96	106.84	0.85
25. PAPERBOARD CONTAINERS & BOXES	30.19	31.09	31.89	32.58	33.02	33.30	1.97
26. PRINTING & PUBLISHING	351.86	351.20	351.87	352.51	351.96	351.24	-0.04
27. CHEMICALS & PRODUCTS	87.37	89.04	90.44	91.35	91.91	92.41	1.13
28. PLASTICS & SYNTHETIC MATLS.	40.52	42.05	43.64	44.78	45.43	45.64	2.41
29. DRUGS,CLEANING & TOILET PREP.	33.84	34.09	34.64	35.09	35.13	35.25	0.82
30. PAINTS & ALLIED PRODUCTS	4.60	4.82	4.99	5.17	5.27	5.34	3.01
31. PET REFINING & REL. PROD.	32.46	32.42	32.61	32.91	32.97	32.93	0.29
32. RUBBER & MISC. PLASTICS PROD.	110.12	113.79	118.52	122.32	125.38	126.60	2.83
33. LEATHER TANNING & FINISHING	1.56	1.61	1.67	1.67	1.67	1.66	1.26
34. FOOTWEAR & OTHER LEATHER PROD.	13.10	13.15	13.23	13.21	13.13	13.05	-0.07

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
61. CRAFT&RELATED WORKERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
35. GLASS & GLASS PRODUCTS	32.97	33.45	33.96	34.15	33.92	33.55	0.35
36. STONE & CLAY PRODUCTS	74.78	76.49	77.98	80.11	80.68	79.89	1.33
37. PRIMARY FERROUS METALS	193.43	198.43	203.74	205.40	205.33	203.64	1.03
38. NONFERROUS METALS	93.05	96.57	100.58	103.61	105.37	106.93	2.82
39. METAL CONTAINERS	23.27	22.94	22.99	23.40	23.56	23.68	0.35
40. FAB. STRUCTURAL METAL PRODUCTS	133.71	133.72	136.70	140.98	143.70	145.34	1.68
41. SCREW MACHINE PROD.&STAMPINGS	86.29	90.83	93.90	95.62	96.23	96.72	2.31
42. OTHER FAB. METAL PRODUCTS	56.04	57.72	60.20	62.03	63.36	64.76	2.94
43. ENGINES & TURBINES	21.02	21.70	22.50	22.74	22.86	22.96	1.78
44. FARM & GARDEN MACHINERY	19.32	19.86	20.91	21.22	21.49	21.75	2.39
45. CONSTR. & MINING MACHINERY	40.87	43.18	45.42	47.00	48.23	48.74	3.58
46. MATERIALS HANDLING MACH. & EQ.	14.61	15.07	15.97	16.62	17.06	17.41	3.56
47. METALWORKING MACH. & EQ.	87.47	90.91	96.20	99.99	102.76	104.58	3.64
48. SPECIAL INDUSTRY MACHINERY	33.52	34.23	35.94	37.55	38.47	39.27	3.22
49. GENERAL INDUSTRY MACHINERY	53.89	55.23	57.82	59.36	60.36	61.33	2.62
50. MISC. NONELECTRICAL MACH.	41.52	42.67	44.55	45.62	46.11	46.71	2.38
51. OFFICE,COMPUTING & ACCT. MACH.	49.19	52.00	55.02	56.82	58.37	60.42	4.20
52. SERVICE INDUSTRY MACHINES	27.55	28.64	30.01	30.49	30.56	30.58	2.10
53. ELECTRICAL MACHINERY	49.21	50.09	52.37	53.59	54.19	54.60	2.10
54. HOUSEHOLD APPLIANCES	20.28	20.81	21.35	22.05	22.50	22.79	2.36
55. ELECTRIC LIGHTING & WIRING EQ.	30.48	30.68	31.51	32.27	32.75	33.16	1.70
56. RADIO,TV, & COMMUNICATION EQ.	75.14	76.38	78.26	79.11	79.33	80.15	1.30
57. ELECTRONIC COMPONENTS & ACCESS.	66.11	68.91	72.31	75.20	77.32	78.92	3.61
58. MISC. ELECTRICAL MACH. & EQ.	26.93	. 27.87	28.98	29.31	29.68	29.91	2.12
59. MOTOR VEHICLES & EQUIPMENT	179.22	187.38	193.76	196.88	199.07	200.21	2.24
60. AIRCRAFT & PARTS	113.61	117.96	120.99	124.59	124.69	124.41	1.83
61. OTHER TRANSPORTATION EQ.	88.07	90.71	93.95	96.01	96.27	97.13	1.98
62. INSTRUMENTS & SUPPLIES	61.39	62.49	65.00	67.56	69.38	70.56	2.82
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	38.26	38.90	40.68	42.58	44.10	45.33	3.45
64. MISC. MANUFACTURING	52.62	53.11	54.51	55.74	56.31	56.42	1.40
65. TRANSPORTATION & WAREHOUSING	391.84	400.33	408.16	417.75	419.97	419.58	1.38
66. COMMUNICATION EXC. RADIO & TV	401.41	404.40	414.11	418.34	427.95	431.74	1.47
67. RADIO & TV BROADCASTING	1.54	1.59	1.63	1.66	1.67	1.68	1.75
68. UTILITIES	305.15	305.57	305.76	305.82	306.20	306.10	0.06
69. WHOLESALE & RETAIL TRADE	1,607.54	1,669.82	1,732.39	1,787.19	1,832.47	1,879.19	3.17
70. FINANCE & INSURANCE	20.03	20.41	20.87	21.44	22.05	22.63	2.48
71. REAL ESTATE & RENTAL	67.52	67.89	68.55	69.14	69.41	69.49	0.58
72. PERSONAL SERVICES EXC. AUTO.	286.69	295.28	305.21	315.25	325.34	334.69	3.14
73. BUSINESS SERVICES	98.42	101.90	105.76	110.25	114.11	117.26	3.57

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
61. CRAFT&RELATED WORKERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
74. EATING & DRINKING PLACES	5.37	5.47	5.56	5.61	5.65	5.66	1.06
75. AUTOMOBILE REPAIR & SERVICE	219.88	223.57	225.02	225.59	226.44	227.89	0.72
76. AMUSEMENTS	55.08	55.59	56.89	57.98	59.17	60.24	1.81
77. MISC. SERVICES	425.16	431.81	439.65	450.62	463.19	477.15	2.33
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	1,234.64	1,261.45	1,291.29	1,320.18	1,341.98	1,358.83	1.94
82. GOVERNMENT INDUSTRY	936.76	932.47	938.63	950.97	963.46	977.27	0.85
TOTAL, ALL INDUSTRIES	11,735.48	11,990.32	12,273.89	12,548.51	12,755.70	12,915.93	1.94

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
62. CONSTRUCTION CRAFTS WORKERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
1. LIVESTOCK & PRODUCTS	0.03	0.03	0.03	0.03	0.03	0.03	2.58
2. OTHER AGRICULTURAL PRODUCTS	0.04	0.04	0.05	0.05	0.05	0.05	2.77
3. FORESTRY & FISHERY PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	5.99
4. AGR.,FORESTRY,&FISHERY SERV.	0.01	0.02	0.02	0.02	0.02	0.02	6.86
5. IRON ORE MINING	0.11	0.13	0.14	0.15	0.16	0.17	8.06
6. NONFERROUS METAL MINING	0.15	0.17	0.19	0.21	0.23	0.25	11.33
7. COAL MINING	0.18	0.20	0.22	0.24	0.26	0.27	8.42
8. CRUDE PETROLEUM & N. GAS	0.13	0.13	0.14	0.15	0.15	0.16	4.28
9. STONE&CLAY MINING & QUARRYING	0.02	0.03	0.03	0.03	0.04	0.04	10.01
10. CHEM&FERTILIZER MIN. MINING	0.02	0.02	0.02	0.02	0.02	0.03	7.92
11. NEW CONSTRUCTION	51.06	57.67	61.95	68.36	73.49	77.05	8.58
13. ORDNANCE & ACCESSORIES	4.92	5.58	6.09	6.59	6.96	7.24	8.02
14. FOOD & KINDRED PRODUCTS	0.05	0.05	0.06	0.06	0.06	0.07	5.32
16. FABRIC,YARN & THREAD MILLS	0.05	0.05	0.06	0.06	0.06	0.06	4.32
17. MISC. TEXTILE GOODS	0.02	0.02	0.02	0.02	0.02	0.02	7.14
19. MISC. FABRICATED TEXTILE PROD.	0.02	0.02	0.02	0.02	0.02	0.02	4.65
20. LUMBER & WOOD PRODUCTS	0.36	0.43	0.47	0.53	0.59	0.64	11.97
21. WOOD CONTAINERS	0.03	0.04	0.04	0.05	0.05	0.05	9.79
22. HOUSEHOLD FURNITURE	0.01	0.01	0.01	0.01	0.01	0.01	3.68
23. OTHER FURNITURE & FIXTURES	0.03	0.03	0.04	0.04	0.04	0.04	4.80
24. PAPER & ALLIED PRODUCTS	0.25	0.28	0.30	0.32	0.34	0.35	6.70
25. PAPERBOARD CONTAINERS & BOXES	0.02	0.02	0.03	0.03	0.03	0.03	8.79
26. PRINTING & PUBLISHING	0.05	0.05	0.05	0.06	0.06	0.06	6.24
27. CHEMICALS & PRODUCTS	0.73	0.80	0.86	0.94	1.01	1.06	7.80
28. PLASTICS & SYNTHETIC MATLS.	0.13	0.14	0.16	0.17	0.19	0.19	8.38
29. DRUGS,CLEANING & TOILET PREP.	0.01	0.01	0.02	0.02	0.02	0.02	4.22
30. PAINTS & ALLIED PRODUCTS	0.02	0.02	0.02	0.02	0.03	0.03	8.21
31. PET REFINING & REL. PROD.	0.36	0.38	0.41	0.43	0.46	0.47	5.23
32. RUBBER & MISC. PLASTICS PROD.	0.16	0.18	0.20	0.23	0.25	0.26	10.22
35. GLASS & GLASS PRODUCTS	0.07	0.08	0.09	0.10	0.10	0.11	9.11
36. STONE & CLAY PRODUCTS	0.30	0.34	0.37	0.40	0.43	0.45	8.34
37. PRIMARY FERROUS METALS	1.70	1.88	2.02	2.20	2.33	2.43	7.42
38. NONFERROUS METALS	0.79	0.91	1.01	1.12	1.21	1.27	9.85
39. METAL CONTAINERS	0.02	0.02	0.02	0.02	0.02	0.02	6.59
40. FAB. STRUCTURAL METAL PRODUCTS	0.52	0.58	0.62	0.67	0.70	0.74	7.27
41. SCREW MACHINE PROD.&STAMPINGS	0.26	0.29	0.32	0.34	0.37	0.38	7.69
42. OTHER FAB. METAL PRODUCTS	0.10	0.11	0.13	0.14	0.15	0.16	9.96

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
62. CONSTRUCTION CRAFTS WORKERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
43. ENGINES & TURBINES	0.17	0.19	0.21	0.23	0.24	0.25	7.72
44. FARM & GARDEN MACHINERY	0.01	0.01	0.01	0.01	0.01	0.01	8.10
45. CONSTR. & MINING MACHINERY	0.04	0.04	0.05	0.05	0.05	0.05	7.25
46. MATERIALS HANDLING MACH. & EQ.	0.06	0.07	0.08	0.09	0.10	0.10	9.12
47. METALWORKING MACH. & EQ.	0.15	0.17	0.19	0.21	0.23	0.24	9.36
48. SPECIAL INDUSTRY MACHINERY	0.01	0.02	0.02	0.02	0.02	0.02	12.05
49. GENERAL INDUSTRY MACHINERY	0.16	0.18	0.19	0.20	0.22	0.23	7.52
50. MISC. NONELECTRICAL MACH.	0.12	0.13	0.15	0.16	0.17	0.17	7.53
51. OFFICE,COMPUTING & ACCT. MACH.	0.04	0.05	0.05	0.06	0.06	0.06	7.30
52. SERVICE INDUSTRY MACHINES	0.03	0.04	0.04	0.05	0.05	0.06	13.37
53. ELECTRICAL MACHINERY	0.15	0.17	0.19	0.21	0.22	0.23	9.03
55. ELECTRIC LIGHTING & WIRING EQ.	0.08	0.09	0.10	0.11	0.12	0.12	8.25
56. RADIO,TV, & COMMUNICATION EQ.	2.04	2.34	2.57	2.79	2.94	3.00	8.08
57. ELECTRONIC COMPONENTS & ACCESS.	0.53	0.63	0.70	0.79	0.86	0.90	11.36
58. MISC. ELECTRICAL MACH. & EQ.	0.05	0.06	0.06	0.07	0.07	0.08	9.57
59. MOTOR VEHICLES & EQUIPMENT	0.38	0.46	0.52	0.62	0.72	0.84	17.14
60. AIRCRAFT & PARTS	3.40	3.84	4.24	4.67	5.00	5.13	8.59
61. OTHER TRANSPORTATION EQ.	8.12	8.57	8.85	9.03	9.32	9.60	3.40
62. INSTRUMENTS & SUPPLIES	0.19	0.21	0.23	0.25	0.27	0.28	8.30
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.04	0.04	0.04	0.05	0.05	0.05	8.54
64. MISC. MANUFACTURING	0.04	0.04	0.04	0.05	0.05	0.05	4.11
65. TRANSPORTATION & WAREHOUSING	0.91	0.94	0.97	1.01	1.03	1.03	2.49
66. COMMUNICATION EXC. RADIO & TV	0.01	0.01	0.01	0.01	0.01	0.01	6.27
67. RADIO & TV BROADCASTING	0.01	0.01	0.01	0.01	0.01	0.01	8.15
68. UTILITIES	0.69	0.75	0.81	0.86	0.91	0.92	6.02
69. WHOLESALE & RETAIL TRADE	0.57	0.65	0.73	0.81	0.88	0.93	10.27
70. FINANCE & INSURANCE	0.02	0.02	0.03	0.03	0.03	0.03	9.36
71. REAL ESTATE & RENTAL	0.40	0.44	0.47	0.51	0.54	0.56	6.79
72. PERSONAL SERVICES EXC. AUTO.	0.38	0.43	0.48	0.53	0.57	0.61	10.15
73. BUSINESS SERVICES	0.36	0.41	0.45	0.49	0.52	0.54	8.23
74. EATING & DRINKING PLACES	0.01	0.01	0.01	0.01	0.01	0.01	9.77
76. AMUSEMENTS	0.04	0.05	0.05	0.05	0.06	0.06	8.43
77. MISC. SERVICES	0.72	0.73	0.76	0.81	0.84	0.86	3.66
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	37.68	38.92	40.49	42.53	43.96	44.77	3.51
82. GOVERNMENT INDUSTRY	39.31	38.61	39.32	40.35	40.94	41.15	0.92
TOTAL, ALL INDUSTRIES	159.68	170.15	179.32	191.58	201.08	207.25	5.35

TOTAL EMPLOYMENT

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
62. CONSTRUCTION CRAFTS WORKERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
1. LIVESTOCK & PRODUCTS	4.09	4.13	4.06	3.99	3.96	3.92	-0.82
2. OTHER AGRICULTURAL PRODUCTS	29.62	29.74	29.88	29.77	29.71	29.67	0.03
3. FORESTRY & FISHERY PRODUCTS	0.28	0.30	0.32	0.33	0.33	0.33	3.03
4. AGR.,FORESTRY,&FISHERY SERV.	0.76	0.78	0.79	0.81	0.82	0.83	1.76
5. IRON ORE MINING	2.22	2.39	2.56	2.54	2.49	2.44	1.89
6. NONFERROUS METAL MINING	2.51	2.66	2.77	2.85	2.84	2.87	2.73
7. COAL MINING	6.49	6.77	6.98	7.11	7.31	7.43	2.75
8. CRUDE PETROLEUM & N. GAS	1.71	1.71	1.71	1.68	1.65	1.67	-0.51
9. STONE&CLAY MINING & QUARRYING	0.78	0.80	0.83	0.86	0.88	0.89	2.61
10. CHEM&FERTILIZER MIN. MINING	0.88	0.90	0.93	0.95	0.96	0.97	2.02
11. NEW CONSTRUCTION	1,358.65	1,386.14	1,413.25	1,457.22	1,491.65	1,511.63	2.16
13. ORDNANCE & ACCESSORIES	8.14	8.34	8.50	8.71	8.84	8.95	1.91
14. FOOD & KINDRED PRODUCTS	7.57	7.69	7.76	7.75	7.69	7.64	0.19
16. FABRIC,YARN & THREAD MILLS	4.08	4.17	4.25	4.30	4.30	4.28	0.95
17. MISC. TEXTILE GOODS	1.10	1.14	1.19	1.23	1.25	1.26	2.74
19. MISC. FABRICATED TEXTILE PROD.	0.62	0.63	0.65	0.66	0.67	0.67	1.83
20. LUMBER & WOOD PRODUCTS	17.64	19.68	21.03	22.42	23.24	23.60	5.99
21. WOOD CONTAINERS	0.55	0.55	0.56	0.57	0.58	0.58	1.14
22. HOUSEHOLD FURNITURE	1.41	1.48	1.53	1.58	1.62	1.63	3.01
23. OTHER FURNITURE & FIXTURES	2.07	2.09	2.16	2.23	2.28	2.33	2.37
24. PAPER & ALLIED PRODUCTS	13.68	14.09	14.24	14.30	14.29	14.27	0.86
25. PAPERBOARD CONTAINERS & BOXES	0.95	0.98	1.00	1.02	1.03	1.04	1.72
26. PRINTING & PUBLISHING	2.92	2.94	2.96	2.99	3.00	3.01	0.61
27. CHEMICALS & PRODUCTS	15.08	15.39	15.65	15.83	15.95	16.06	1.27
28. PLASTICS & SYNTHETIC MATLS.	5.37	5.56	5.74	5.87	5.93	5.94	2.00
29. DRUGS,CLEANING & TOILET PREP.	4.02	4.05	4.11	4.17	4.17	4.18	0.81
30. PAINTS & ALLIED PRODUCTS	0.35	0.37	0.38	0.39	0.40	0.41	2.99
31. PET REFINING & REL. PROD.	6.76	6.75	6.79	6.85	6.86	6.86	0.30
32. RUBBER & MISC. PLASTICS PROD.	5.89	6.08	6.33	6.53	6.70	6.76	2.80
35. GLASS & GLASS PRODUCTS	3.21	3.26	3.31	3.33	3.31	3.28	0.42
36. STONE & CLAY PRODUCTS	9.36	9.55	9.72	9.96	10.01	9.89	1.10
37. PRIMARY FERROUS METALS	23.81	24.43	25.10	25.31	25.31	25.11	1.07
38. NONFERROUS METALS	9.39	9.78	10.23	10.58	10.80	11.00	3.23
39. METAL CONTAINERS	1.13	1.12	1.12	1.14	1.15	1.15	0.34
40. FAB. STRUCTURAL METAL PRODUCTS	11.67	11.65	11.90	12.26	12.48	12.60	1.56
41. SCREW MACHINE PROD.&STAMPINGS	4.28	4.50	4.64	4.72	4.74	4.76	2.16
42. OTHER FAB. METAL PRODUCTS	2.17	2.24	2.35	2.43	2.49	2.55	3.25
43. ENGINES & TURBINES	2.06	2.13	2.21	2.23	2.24	2.25	1.78
44. FARM & GARDEN MACHINERY	1.72	1.77	1.86	1.88	1.91	1.93	2.27

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
62. CONSTRUCTION CRAFTS WORKERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
45. CONSTR. & MINING MACHINERY	3.19	3.37	3.55	3.67	3.77	3.82	3.64
46. MATERIALS HANDLING MACH. & EQ.	1.14	1.18	1.25	1.30	1.33	1.36	3.62
47. METALWORKING MACH. & EQ.	2.92	3.04	3.22	3.35	3.45	3.51	3.76
48. SPECIAL INDUSTRY MACHINERY	1.96	2.00	2.10	2.20	2.25	2.30	3.21
49. GENERAL INDUSTRY MACHINERY	3.57	3.66	3.83	3.94	4.00	4.07	2.63
50. MISC. NONELECTRICAL MACH.	1.06	1.09	1.14	1.16	1.17	1.19	2.22
51. OFFICE,COMPUTING & ACCT. MACH.	1.14	1.18	1.23	1.25	1.27	1.30	2.71
52. SERVICE INDUSTRY MACHINES	1.80	1.87	1.96	1.99	1.99	1.99	2.10
53. ELECTRICAL MACHINERY	3.02	3.07	3.20	3.28	3.31	3.33	1.98
55. ELECTRIC LIGHTING & WIRING EQ.	1.73	1.75	1.79	1.84	1.86	1.89	1.70
56. RADIO,TV, & COMMUNICATION EQ.	4.82	4.93	5.09	5.17	5.22	5.30	1.93
57. ELECTRONIC COMPONENTS & ACCESS.	2.40	2.50	2.62	2.73	2.81	2.87	3.64
58. MISC. ELECTRICAL MACH. & EQ.	1.79	1.85	1.93	1.95	1.97	1.99	2.12
59. MOTOR VEHICLES & EQUIPMENT	19.77	20.67	21.37	21.72	21.96	22.08	2.23
60. AIRCRAFT & PARTS	6.81	7.08	7.27	7.50	7.52	7.51	1.99
61. OTHER TRANSPORTATION EQ.	28.04	28.88	29.91	30.57	30.66	30.93	1.99
62. INSTRUMENTS & SUPPLIES	1.61	1.64	1.71	1.78	1.83	1.86	2.84
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.81	0.82	0.86	0.90	0.92	0.95	3.18
64. MISC. MANUFACTURING	3.59	3.58	3.63	3.66	3.66	3.62	0.15
65. TRANSPORTATION & WAREHOUSING	21.41	21.50	21.55	21.67	21.40	21.00	-0.38
66. COMMUNICATION EXC. RADIO & TV	0.26	0.26	0.27	0.28	0.29	0.29	2.53
67. RADIO & TV BROADCASTING	0.35	0.36	0.37	0.37	0.38	0.38	1.71
68. UTILITIES	31.97	32.01	32.04	32.05	32.09	32.08	0.07
69. WHOLESALE & RETAIL TRADE	93.71	97.35	101.01	104.22	106.87	109.60	3.18
70. FINANCE & INSURANCE	2.48	2.52	2.57	2.64	2.71	2.78	2.28
71. REAL ESTATE & RENTAL	14.57	14.64	14.77	14.88	14.93	14.94	0.51
72. PERSONAL SERVICES EXC. AUTO.	20.50	21.20	22.00	22.80	23.61	24.36	3.51
73. BUSINESS SERVICES	7.51	7.72	7.95	8.23	8.47	8.65	2.86
74. EATING & DRINKING PLACES	0.37	0.38	0.38	0.38	0.39	0.39	1.07
76. AMUSEMENTS	4.23	4.29	4.41	4.51	4.62	4.73	2.24
77. MISC. SERVICES	111.24	112.24	113.56	115.69	118.22	121.09	1.71
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	652.79	664.62	677.29	694.65	708.15	717.31	1.90
82. GOVERNMENT INDUSTRY	268.22	266.64	268.01	271.03	274.12	277.86	0.71
TOTAL, ALL INDUSTRIES	2,916.47	2,969.36	3,025.93	3,103.51	3,163.82	3,204.73	1.90

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE
BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
63. ELECTRICIANS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
5. IRON ORE MINING	0.08	0.09	0.10	0.11	0.11	0.12	7.88
6. NONFERROUS METAL MINING	0.09	0.11	0.12	0.13	0.14	0.15	11.26
7. COAL MINING	0.14	0.16	0.17	0.18	0.20	0.21	8.19
8. CRUDE PETROLEUM & N. GAS	0.05	0.06	0.06	0.06	0.07	0.07	4.44
9. STONE&CLAY MINING & QUARRYING	0.02	0.02	0.02	0.03	0.03	0.03	10.00
10. CHEM&FERTILIZER MIN. MINING	0.01	0.01	0.01	0.01	0.02	0.02	7.91
11. NEW CONSTRUCTION	8.28	9.34	10.02	11.05	11.87	12.44	8.49
13. ORDNANCE & ACCESSORIES	1.25	1.42	1.55	1.68	1.77	1.84	8.04
14. FOOD & KINDRED PRODUCTS	0.04	0.04	0.04	0.04	0.05	0.05	5.35
16. FABRIC, YARN & THREAD MILLS	0.03	0.03	0.03	0.03	0.04	0.04	4.57
17. MISC. TEXTILE GOODS	0.01	0.01	0.01	0.01	0.01	0.01	7.14
19. MISC. FABRICATED TEXTILE PROD.	0.01	0.01	0.01	0.01	0.01	0.01	4.69
20. LUMBER & WOOD PRODUCTS	0.07	0.08	0.09	0.10	0.11	0.12	10.89
23. OTHER FURNITURE & FIXTURES	0.01	0.01	0.01	0.01	0.01	0.01	4.49
24. PAPER & ALLIED PRODUCTS	0.12	0.13	0.14	0.15	0.15	0.16	6.48
25. PAPERBOARD CONTAINERS & BOXES	0.01	0.02	0.02	0.02	0.02	0.02	8.78
26. PRINTING & PUBLISHING	0.03	0.03	0.03	0.03	0.04	0.04	6.17
27. CHEMICALS & PRODUCTS	0.27	0.30	0.32	0.35	0.38	0.40	7.99
28. PLASTICS & SYNTHETIC MATLS.	0.06	0.07	0.08	0.09	0.09	0.09	8.04
30. PAINTS & ALLIED PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	8.22
31. PET REFINING & REL. PROD.	0.08	0.09	0.09	0.10	0.11	0.11	5.20
32. RUBBER & MISC. PLASTICS PROD.	0.09	0.10	0.11	0.13	0.14	0.15	10.26
35. GLASS & GLASS PRODUCTS	0.02	0.03	0.03	0.03	0.03	0.04	8.17
36. STONE & CLAY PRODUCTS	0.08	0.09	0.10	0.11	0.11	0.12	6.87
37. PRIMARY FERROUS METALS	0.82	0.91	0.98	1.07	1.14	1.18	7.47
38. NONFERROUS METALS	0.46	0.53	0.59	0.65	0.70	0.74	9.86
39. METAL CONTAINERS	0.01	0.01	0.02	0.02	0.02	0.02	6.60
40. FAB. STRUCTURAL METAL PRODUCTS	0.11	0.13	0.14	0.15	0.16	0.17	7.72
41. SCREW MACHINE PROD.&STAMPINGS	0.16	0.18	0.20	0.22	0.23	0.24	7.69
42. OTHER FAB. METAL PRODUCTS	0.05	0.06	0.07	0.08	0.08	0.09	9.94
43. ENGINES & TURBINES	0.08	0.09	0.10	0.10	0.11	0.11	7.71
45. CONSTR. & MINING MACHINERY	0.02	0.02	0.02	0.02	0.03	0.03	7.25
46. MATERIALS HANDLING MACH. & EQ.	0.03	0.04	0.04	0.05	0.05	0.05	9.12
47. METALWORKING MACH. & EQ.	0.09	0.10	0.11	0.12	0.13	0.14	9.35
48. SPECIAL INDUSTRY MACHINERY	0.01	0.01	0.01	0.01	0.01	0.01	12.06
49. GENERAL INDUSTRY MACHINERY	0.07	0.08	0.09	0.09	0.10	0.10	7.52
50. MISC. NONELECTRICAL MACH.	0.04	0.04	0.05	0.05	0.06	0.06	7.53

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
63. ELECTRICIANS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
51. OFFICE,COMPUTING & ACCT. MACH.	0.03	0.03	0.03	0.04	0.04	0.04	7.31
52. SERVICE INDUSTRY MACHINES	0.01	0.02	0.02	0.02	0.02	0.03	13.37
53. ELECTRICAL MACHINERY	0.10	0.11	0.12	0.13	0.14	0.15	9.02
55. ELECTRIC LIGHTING & WIRING EQ.	0.05	0.06	0.06	0.07	0.07	0.07	8.24
56. RADIO,TV, & COMMUNICATION EQ.	1.22	1.40	1.54	1.67	1.76	1.80	8.08
57. ELECTRONIC COMPONENTS & ACCESS.	0.31	0.37	0.41	0.46	0.51	0.53	11.37
58. MISC. ELECTRICAL MACH. & EQ.	0.03	0.04	0.04	0.04	0.05	0.05	9.57
59. MOTOR VEHICLES & EQUIPMENT	0.20	0.24	0.27	0.32	0.38	0.44	17.14
60. AIRCRAFT & PARTS	1.46	1.66	1.82	2.01	2.15	2.21	8.59
61. OTHER TRANSPORTATION EQ.	2.60	2.75	2.83	2.89	2.98	3.08	3.40
62. INSTRUMENTS & SUPPLIES	0.10	0.12	0.13	0.14	0.15	0.16	8.34
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.01	0.02	0.02	0.02	0.02	0.02	8.50
64. MISC. MANUFACTURING	0.02	0.02	0.02	0.02	0.02	0.02	4.35
65. TRANSPORTATION & WAREHOUSING	0.45	0.47	0.48	0.50	0.51	0.51	2.41
68. UTILITIES	0.36	0.39	0.42	0.45	0.48	0.48	6.18
69. WHOLESALE & RETAIL TRADE	0.02	0.03	0.03	0.03	0.03	0.04	9.01
70. FINANCE & INSURANCE	0.01	0.01	0.01	0.01	0.01	0.01	9.31
71. REAL ESTATE & RENTAL	0.01	0.01	0.02	0.02	0.02	0.02	6.94
72. PERSONAL SERVICES EXC. AUTO.	0.15	0.17	0.19	0.21	0.22	0.24	10.50
73. BUSINESS SERVICES	0.10	0.11	0.12	0.13	0.14	0.15	8.22
76. AMUSEMENTS	0.02	0.02	0.02	0.02	0.03	0.03	8.82
77. MISC. SERVICES	0.13	0.13	0.13	0.14	0.15	0.15	3.53
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	3.55	3.68	3.84	4.04	4.17	4.24	3.64
82. GOVERNMENT INDUSTRY	11.21	11.02	11.27	11.61	11.84	11.95	1.29
TOTAL, ALL INDUSTRIES	35.02	37.35	39.48	42.16	44.26	45.63	5.43
TOTAL EMPLOYMENT							
5. IRON ORE MINING	1.58	1.70	1.82	1.80	1.76	1.72	1.72
6. NONFERROUS METAL MINING	1.56	1.65	1.72	1.77	1.76	1.78	2.66
7. COAL MINING	4.97	5.18	5.32	5.41	5.55	5.64	2.54
8. CRUDE PETROLEUM & N. GAS	0.72	0.72	0.72	0.71	0.70	0.71	-0.35
9. STONE&CLAY MINING & QUARRYING	0.61	0.62	0.64	0.67	0.68	0.69	2.59
10. CHEM&FERTILIZER MIN. MINING	0.55	0.56	0.58	0.59	0.60	0.60	2.01
11. NEW CONSTRUCTION	220.21	224.47	228.67	235.60	240.98	244.03	2.08
13. ORDNANCE & ACCESSORIES	2.07	2.12	2.16	2.22	2.25	2.28	1.93
14. FOOD & KINDRED PRODUCTS	5.47	5.56	5.61	5.60	5.56	5.53	0.22
16. FABRIC,YARN & THREAD MILLS	2.34	2.40	2.45	2.49	2.50	2.49	1.19
17. MISC. TEXTILE GOODS	0.61	0.63	0.66	0.68	0.69	0.70	2.74

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
63. ELECTRICIANS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
19. MISC. FABRICATED TEXTILE PROD.	0.28	0.29	0.29	0.30	0.30	0.31	1.86
20. LUMBER & WOOD PRODUCTS	3.44	3.80	4.02	4.24	4.36	4.39	4.97
23. OTHER FURNITURE & FIXTURES	0.40	0.41	0.42	0.43	0.44	0.45	2.07
24. PAPER & ALLIED PRODUCTS	6.23	6.41	6.46	6.48	6.46	6.44	0.66
25. PAPERBOARD CONTAINERS & BOXES	0.62	0.63	0.65	0.66	0.67	0.67	1.72
26. PRINTING & PUBLISHING	1.72	1.73	1.74	1.75	1.76	1.77	0.55
27. CHEMICALS & PRODUCTS	5.59	5.72	5.83	5.90	5.96	6.01	1.45
28. PLASTICS & SYNTHETIC MATLS.	2.64	2.72	2.80	2.86	2.88	2.87	1.68
30. PAINTS & ALLIED PRODUCTS	0.18	0.18	0.19	0.20	0.20	0.20	2.99
31. PET REFINING & REL. PROD.	1.56	1.56	1.57	1.58	1.58	1.58	0.26
32. RUBBER & MISC. PLASTICS PROD.	3.32	3.44	3.58	3.69	3.79	3.82	2.83
35. GLASS & GLASS PRODUCTS	1.13	1.13	1.14	1.14	1.12	1.10	-0.45
36. STONE & CLAY PRODUCTS	2.56	2.58	2.59	2.62	2.60	2.53	-0.27
37. PRIMARY FERROUS METALS	11.57	11.88	12.21	12.32	12.33	12.24	1.13
38. NONFERROUS METALS	5.47	5.70	5.96	6.16	6.29	6.41	3.23
39. METAL CONTAINERS	0.94	0.92	0.92	0.94	0.95	0.95	0.35
40. FAB. STRUCTURAL METAL PRODUCTS	2.57	2.58	2.65	2.74	2.80	2.84	1.98
41. SCREW MACHINE PROD.&STAMPINGS	2.68	2.81	2.90	2.95	2.97	2.98	2.16
42. OTHER FAB. METAL PRODUCTS	1.19	1.22	1.28	1.32	1.36	1.39	3.23
43. ENGINES & TURBINES	0.93	0.96	1.00	1.01	1.01	1.02	1.78
45. CONSTR. & MINING MACHINERY	1.61	1.71	1.80	1.86	1.91	1.93	3.64
46. MATERIALS HANDLING MACH. & EQ.	0.58	0.60	0.63	0.66	0.68	0.69	3.62
47. METALWORKING MACH. & EQ.	1.73	1.80	1.90	1.98	2.04	2.08	3.75
48. SPECIAL INDUSTRY MACHINERY	0.92	0.94	0.99	1.03	1.06	1.08	3.22
49. GENERAL INDUSTRY MACHINERY	1.65	1.69	1.77	1.81	1.84	1.87	2.62
50. MISC. NONELECTRICAL MACH.	0.36	0.37	0.38	0.39	0.40	0.40	2.22
51. OFFICE,COMPUTING & ACCT. MACH.	0.74	0.77	0.80	0.82	0.83	0.85	2.71
52. SERVICE INDUSTRY MACHINES	0.82	0.85	0.89	0.90	0.91	0.91	2.10
53. ELECTRICAL MACHINERY	1.96	1.99	2.08	2.12	2.14	2.16	1.97
55. ELECTRIC LIGHTING & WIRING EQ.	1.03	1.04	1.06	1.09	1.11	1.12	1.70
56. RADIO,TV, & COMMUNICATION EQ.	2.89	2.96	3.05	3.10	3.13	3.18	1.93
57. ELECTRONIC COMPONENTS & ACCESS.	1.41	1.47	1.54	1.61	1.65	1.69	3.65
58. MISC. ELECTRICAL MACH. & EQ.	1.16	1.20	1.25	1.26	1.28	1.29	2.12
59. MOTOR VEHICLES & EQUIPMENT	10.30	10.76	11.13	11.31	11.43	11.50	2.23
60. AIRCRAFT & PARTS	2.93	3.05	3.13	3.23	3.24	3.24	1.99
61. OTHER TRANSPORTATION EQ.	8.98	9.25	9.58	9.80	9.82	9.91	1.99
62. INSTRUMENTS & SUPPLIES	0.90	0.92	0.95	0.99	1.02	1.04	2.87
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.34	0.35	0.36	0.38	0.39	0.40	3.14
64. MISC. MANUFACTURING	1.61	1.61	1.64	1.66	1.66	1.65	0.38

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
63. ELECTRICIANS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
65. TRANSPORTATION & WAREHOUSING	10.59	10.63	10.65	10.70	10.56	10.35	-0.46
68. UTILITIES	16.68	16.73	16.77	16.80	16.85	16.87	0.22
69. WHOLESALE & RETAIL TRADE	3.86	3.96	4.06	4.14	4.20	4.26	2.01
70. FINANCE & INSURANCE	0.76	0.77	0.79	0.81	0.83	0.85	2.23
71. REAL ESTATE & RENTAL	0.49	0.49	0.49	0.50	0.50	0.50	0.65
72. PERSONAL SERVICES EXC. AUTO.	7.93	8.23	8.57	8.91	9.25	9.57	3.84
73. BUSINESS SERVICES	2.04	2.10	2.16	2.23	2.30	2.35	2.85
76. AMUSEMENTS	1.82	1.85	1.91	1.96	2.01	2.07	2.61
77. MISC. SERVICES	19.43	19.58	19.79	20.13	20.55	21.02	1.59
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	48.65	49.57	50.56	51.75	52.63	53.19	1.80
82. GOVERNMENT INDUSTRY	46.95	46.85	47.29	48.07	48.86	49.61	1.11
TOTAL, ALL INDUSTRIES	506.05	515.70	526.00	538.37	547.48	553.31	1.80

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
64. FITTERS, PIPELAYING
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
8. CRUDE PETROLEUM & N. GAS	0.02	0.02	0.02	0.02	0.02	0.02	4.10
11. NEW CONSTRUCTION	0.26	0.30	0.32	0.35	0.38	0.40	8.37
82. GOVERNMENT INDUSTRY	9.35	9.15	9.20	9.31	9.29	9.20	-0.33
TOTAL, ALL INDUSTRIES	9.63	9.46	9.53	9.68	9.69	9.61	-0.04
TOTAL EMPLOYMENT							
8. CRUDE PETROLEUM & N. GAS	0.21	0.21	0.21	0.20	0.20	0.20	-0.68
11. NEW CONSTRUCTION	7.04	7.17	7.29	7.51	7.67	7.76	1.96
82. GOVERNMENT INDUSTRY	5.60	5.47	5.49	5.55	5.53	5.46	-0.50
TOTAL, ALL INDUSTRIES	12.85	12.84	12.99	13.25	13.40	13.42	0.88

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
65. PLUMBERS&PIPEFITTERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
6. NONFERROUS METAL MINING	0.02	0.03	0.03	0.03	0.04	0.04	11.76
8. CRUDE PETROLEUM & N. GAS	0.02	0.02	0.02	0.03	0.03	0.03	4.07
11. NEW CONSTRUCTION	6.76	7.65	8.24	9.12	9.83	10.33	8.86
13. ORDNANCE & ACCESSORIES	0.87	0.99	1.07	1.16	1.22	1.27	7.84
14. FOOD & KINDRED PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	5.36
16. FABRIC,YARN & THREAD MILLS	0.00	0.01	0.01	0.01	0.01	0.01	4.10
20. LUMBER & WOOD PRODUCTS	0.03	0.03	0.03	0.04	0.04	0.05	13.18
24. PAPER & ALLIED PRODUCTS	0.08	0.09	0.10	0.11	0.11	0.12	6.89
27. CHEMICALS & PRODUCTS	0.24	0.27	0.28	0.31	0.33	0.35	7.61
28. PLASTICS & SYNTHETIC MATLS.	0.04	0.05	0.05	0.06	0.06	0.06	8.70
31. PET REFINING & REL. PROD.	0.17	0.18	0.19	0.20	0.21	0.21	5.26
32. RUBBER & MISC. PLASTICS PROD.	0.04	0.04	0.04	0.05	0.05	0.06	9.98
35. GLASS & GLASS PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	8.25
36. STONE & CLAY PRODUCTS	0.01	0.02	0.02	0.02	0.02	0.02	8.10
37. PRIMARY FERROUS METALS	0.26	0.29	0.31	0.33	0.35	0.36	7.03
38. NONFERROUS METALS	0.13	0.15	0.17	0.19	0.20	0.21	9.94
40. FAB. STRUCTURAL METAL PRODUCTS	0.04	0.05	0.05	0.05	0.05	0.06	7.64
41. SCREW MACHINE PROD.&STAMPINGS	0.05	0.06	0.06	0.07	0.07	0.08	7.70
42. OTHER FAB. METAL PRODUCTS	0.02	0.03	0.03	0.03	0.04	0.04	10.09
43. ENGINES & TURBINES	0.05	0.06	0.07	0.07	0.07	0.08	7.72
45. CONSTR. & MINING MACHINERY	0.01	0.01	0.01	0.01	0.01	0.01	7.25
46. MATERIALS HANDLING MACH. & EQ.	0.01	0.02	0.02	0.02	0.02	0.02	9.12
47. METALWORKING MACH. & EQ.	0.02	0.03	0.03	0.03	0.04	0.04	9.37
49. GENERAL INDUSTRY MACHINERY	0.04	0.04	0.04	0.05	0.05	0.05	7.52
50. MISC. NONELECTRICAL MACH.	0.02	0.03	0.03	0.03	0.03	0.04	7.54
52. SERVICE INDUSTRY MACHINES	0.01	0.01	0.01	0.01	0.01	0.01	13.38
53. ELECTRICAL MACHINERY	0.02	0.03	0.03	0.03	0.03	0.03	9.05
55. ELECTRIC LIGHTING & WIRING EQ.	0.01	0.02	0.02	0.02	0.02	0.02	8.24
56. RADIO,TV, & COMMUNICATION EQ.	0.35	0.40	0.44	0.48	0.51	0.52	8.09
57. ELECTRONIC COMPONENTS & ACCESS.	0.11	0.13	0.15	0.17	0.18	0.19	11.37
58. MISC. ELECTRICAL MACH. & EQ.	0.01	0.01	0.01	0.01	0.02	0.02	9.57
59. MOTOR VEHICLES & EQUIPMENT	0.12	0.15	0.17	0.20	0.23	0.27	17.14
60. AIRCRAFT & PARTS	0.65	0.74	0.81	0.90	0.96	0.98	8.59
61. OTHER TRANSPORTATION EQ.	2.76	2.91	3.00	3.07	3.16	3.26	3.41
62. INSTRUMENTS & SUPPLIES	0.03	0.03	0.03	0.04	0.04	0.04	8.23
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.01	0.01	0.01	0.01	0.01	0.01	8.56
65. TRANSPORTATION & WAREHOUSING	0.10	0.10	0.10	0.11	0.11	0.11	2.46

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
65. PLUMBERS&PIPEFITTERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
68. UTILITIES	0.26	0.29	0.31	0.33	0.35	0.35	5.77
69. WHOLESALE & RETAIL TRADE	0.04	0.05	0.05	0.06	0.06	0.06	9.43
71. REAL ESTATE & RENTAL	0.01	0.01	0.01	0.01	0.01	0.01	7.04
72. PERSONAL SERVICES EXC. AUTO.	0.07	0.08	0.09	0.10	0.11	0.12	11.70
73. BUSINESS SERVICES	0.05	0.05	0.06	0.06	0.07	0.07	8.13
77. MISC. SERVICES	0.09	0.09	0.09	0.10	0.10	0.11	3.79
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	2.75	2.90	3.04	3.21	3.34	3.41	4.43
82. GOVERNMENT INDUSTRY	1.84	1.81	1.85	1.90	1.93	1.95	1.10
TOTAL, ALL INDUSTRIES	18.32	20.00	21.29	22.92	24.26	25.19	6.57
TOTAL EMPLOYMENT							
6. NONFERROUS METAL MINING	0.39	0.41	0.43	0.45	0.45	0.45	3.12
8. CRUDE PETROLEUM & N. GAS	0.30	0.30	0.30	0.29	0.29	0.29	-0.70
11. NEW CONSTRUCTION	179.77	183.92	188.02	194.37	199.45	202.59	2.42
13. ORDNANCE & ACCESSORIES	1.44	1.47	1.50	1.53	1.55	1.57	1.74
14. FOOD & KINDRED PRODUCTS	0.94	0.95	0.96	0.96	0.95	0.95	0.23
16. FABRIC,YARN & THREAD MILLS	0.40	0.41	0.41	0.42	0.42	0.41	0.74
20. LUMBER & WOOD PRODUCTS	1.24	1.40	1.51	1.63	1.71	1.75	7.14
24. PAPER & ALLIED PRODUCTS	4.56	4.70	4.76	4.79	4.80	4.80	1.05
27. CHEMICALS & PRODUCTS	5.00	5.09	5.17	5.22	5.25	5.28	1.09
28. PLASTICS & SYNTHETIC MATLS.	1.71	1.77	1.84	1.88	1.91	1.92	2.31
31. PET REFINING & REL. PROD.	3.09	3.08	3.10	3.13	3.14	3.13	0.32
32. RUBBER & MISC. PLASTICS PROD.	1.32	1.36	1.41	1.45	1.48	1.49	2.57
35. GLASS & GLASS PRODUCTS	0.40	0.40	0.40	0.40	0.40	0.39	-0.37
36. STONE & CLAY PRODUCTS	0.43	0.44	0.44	0.45	0.45	0.45	0.88
37. PRIMARY FERROUS METALS	3.64	3.72	3.81	3.82	3.81	3.77	0.71
38. NONFERROUS METALS	1.57	1.64	1.71	1.77	1.81	1.85	3.31
40. FAB. STRUCTURAL METAL PRODUCTS	0.90	0.90	0.92	0.95	0.97	0.99	1.91
41. SCREW MACHINE PROD.&STAMPINGS	0.85	0.90	0.93	0.94	0.95	0.95	2.17
42. OTHER FAB. METAL PRODUCTS	0.52	0.54	0.57	0.59	0.60	0.62	3.36
43. ENGINES & TURBINES	0.64	0.66	0.68	0.69	0.69	0.70	1.78
45. CONSTR. & MINING MACHINERY	0.67	0.71	0.75	0.78	0.80	0.80	3.65
46. MATERIALS HANDLING MACH. & EQ.	0.24	0.25	0.26	0.27	0.28	0.29	3.63
47. METALWORKING MACH. & EQ.	0.48	0.50	0.53	0.55	0.57	0.58	3.77
49. GENERAL INDUSTRY MACHINERY	0.81	0.83	0.86	0.89	0.90	0.92	2.63
50. MISC. NONELECTRICAL MACH.	0.21	0.22	0.23	0.23	0.24	0.24	2.23
52. SERVICE INDUSTRY MACHINES	0.40	0.41	0.43	0.44	0.44	0.44	2.12
53. ELECTRICAL MACHINERY	0.45	0.46	0.48	0.49	0.49	0.50	2.00

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
65. PLUMBERS&PIPEFITTERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
55. ELECTRIC LIGHTING & WIRING EQ.	0.28	0.28	0.29	0.30	0.30	0.30	1.69
56. RADIO,TV, & COMMUNICATION EQ.	0.83	0.85	0.87	0.89	0.90	0.91	1.94
57. ELECTRONIC COMPONENTS & ACCESS.	0.52	0.54	0.56	0.59	0.60	0.62	3.65
58. MISC. ELECTRICAL MACH. & EQ.	0.39	0.40	0.42	0.42	0.43	0.43	2.12
59. MOTOR VEHICLES & EQUIPMENT	6.40	6.69	6.92	7.03	7.11	7.15	2.23
60. AIRCRAFT & PARTS	1.31	1.36	1.40	1.44	1.44	1.44	1.99
61. OTHER TRANSPORTATION EQ.	9.52	9.81	10.16	10.38	10.41	10.51	2.00
62. INSTRUMENTS & SUPPLIES	0.24	0.25	0.26	0.27	0.27	0.28	2.77
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.21	0.22	0.23	0.24	0.24	0.25	3.20
65. TRANSPORTATION & WAREHOUSING	2.26	2.27	2.27	2.29	2.26	2.21	-0.41
68. UTILITIES	12.29	12.28	12.25	12.23	12.22	12.19	-0.16
69. WHOLESALE & RETAIL TRADE	6.70	6.90	7.10	7.27	7.41	7.54	2.40
71. REAL ESTATE & RENTAL	0.31	0.31	0.32	0.32	0.32	0.32	0.74
72. PERSONAL SERVICES EXC. AUTO.	3.72	3.91	4.12	4.33	4.54	4.74	4.97
73. BUSINESS SERVICES	0.98	1.00	1.03	1.07	1.10	1.12	2.76
77. MISC. SERVICES	13.69	13.83	14.01	14.29	14.63	15.00	1.84
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	55.31	56.46	57.64	59.17	60.34	61.14	2.03
82. GOVERNMENT INDUSTRY	20.05	19.83	19.83	19.94	20.05	20.26	0.21
TOTAL, ALL INDUSTRIES	356.21	363.60	371.23	381.03	388.58	393.77	2.03

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE
BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
66. REFRACTORY MATERIALS REPAIRERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
36. STONE & CLAY PRODUCTS	0.02	0.02	0.02	0.03	0.03	0.03	7.35
37. PRIMARY FERROUS METALS	0.29	0.33	0.35	0.38	0.41	0.43	7.64
38. NONFERROUS METALS	0.08	0.09	0.10	0.11	0.12	0.12	9.80
40. FAB. STRUCTURAL METAL PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	8.44
41. SCREW MACHINE PROD.&STAMPINGS	0.01	0.01	0.01	0.01	0.01	0.01	7.62
49. GENERAL INDUSTRY MACHINERY	0.01	0.01	0.01	0.01	0.01	0.01	7.53
TOTAL, ALL INDUSTRIES	0.42	0.47	0.51	0.56	0.60	0.62	8.04
TOTAL EMPLOYMENT							
36. STONE & CLAY PRODUCTS	0.62	0.62	0.63	0.64	0.64	0.62	0.18
37. PRIMARY FERROUS METALS	4.14	4.26	4.38	4.43	4.44	4.41	1.28
38. NONFERROUS METALS	0.90	0.94	0.98	1.01	1.04	1.05	3.18
40. FAB. STRUCTURAL METAL PRODUCTS	0.18	0.18	0.18	0.19	0.20	0.20	2.67
41. SCREW MACHINE PROD.&STAMPINGS	0.13	0.13	0.14	0.14	0.14	0.14	2.09
49. GENERAL INDUSTRY MACHINERY	0.16	0.16	0.17	0.17	0.18	0.18	2.64
TOTAL, ALL INDUSTRIES	6.36	6.54	6.74	6.84	6.88	6.87	1.56

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
67. SHIPWRIGHTS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
61. OTHER TRANSPORTATION EQ.	0.40	0.42	0.43	0.44	0.46	0.47	3.43
65. TRANSPORTATION & WAREHOUSING	0.03	0.03	0.03	0.03	0.03	0.03	2.15
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.43	0.43	0.44	0.46	0.46	0.47	1.53
82. GOVERNMENT INDUSTRY	0.78	0.77	0.78	0.80	0.81	0.82	0.87
TOTAL, ALL INDUSTRIES	1.65	1.66	1.70	1.74	1.78	1.80	1.74
TOTAL EMPLOYMENT							
61. OTHER TRANSPORTATION EQ.	1.38	1.42	1.47	1.50	1.51	1.52	2.02
65. TRANSPORTATION & WAREHOUSING	0.70	0.70	0.70	0.70	0.69	0.67	-0.70
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	1.17	1.18	1.20	1.22	1.23	1.24	1.23
82. GOVERNMENT INDUSTRY	1.35	1.34	1.36	1.38	1.41	1.43	1.21
TOTAL, ALL INDUSTRIES	4.76	4.82	4.91	5.00	5.03	5.06	1.23

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE
BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
68. STRUCTURAL STEEL WORKERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
11. NEW CONSTRUCTION	1.81	2.04	2.18	2.40	2.57	2.69	8.24
13. ORDNANCE & ACCESSORIES	0.04	0.05	0.05	0.06	0.06	0.06	7.70
27. CHEMICALS & PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	8.04
37. PRIMARY FERROUS METALS	0.07	0.08	0.08	0.09	0.09	0.10	7.12
38. NONFERROUS METALS	0.01	0.01	0.01	0.01	0.01	0.02	9.55
40. FAB. STRUCTURAL METAL PRODUCTS	0.16	0.18	0.19	0.20	0.21	0.22	6.96
43. ENGINES & TURBINES	0.01	0.01	0.01	0.01	0.01	0.01	7.75
46. MATERIALS HANDLING MACH. & EQ.	0.01	0.01	0.01	0.01	0.01	0.01	9.13
49. GENERAL INDUSTRY MACHINERY	0.01	0.01	0.01	0.01	0.01	0.01	7.53
57. ELECTRONIC COMPONENTS & ACCESS.	0.01	0.01	0.01	0.01	0.01	0.01	11.29
60. AIRCRAFT & PARTS	0.25	0.28	0.31	0.34	0.36	0.37	8.59
61. OTHER TRANSPORTATION EQ.	0.24	0.25	0.26	0.26	0.27	0.28	2.93
65. TRANSPORTATION & WAREHOUSING	0.01	0.01	0.01	0.01	0.01	0.01	3.44
77. MISC. SERVICES	0.01	0.01	0.01	0.01	0.01	0.01	3.22
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.04	0.04	0.04	0.05	0.05	0.05	5.40
TOTAL, ALL INDUSTRIES	2.72	3.04	3.26	3.55	3.79	3.94	7.70
TOTAL EMPLOYMENT							
11. NEW CONSTRUCTION	48.16	48.97	49.77	51.15	52.21	52.75	1.84
13. ORDNANCE & ACCESSORIES	0.07	0.07	0.07	0.07	0.07	0.08	1.61
27. CHEMICALS & PRODUCTS	0.18	0.19	0.19	0.19	0.19	0.20	1.50
37. PRIMARY FERROUS METALS	0.97	0.99	1.02	1.02	1.02	1.01	0.79
38. NONFERROUS METALS	0.11	0.12	0.12	0.13	0.13	0.13	2.94
40. FAB. STRUCTURAL METAL PRODUCTS	3.54	3.53	3.59	3.69	3.74	3.77	1.26
43. ENGINES & TURBINES	0.09	0.09	0.10	0.10	0.10	0.10	1.81
46. MATERIALS HANDLING MACH. & EQ.	0.12	0.12	0.13	0.13	0.14	0.14	3.63
49. GENERAL INDUSTRY MACHINERY	0.16	0.16	0.17	0.17	0.18	0.18	2.64
57. ELECTRONIC COMPONENTS & ACCESS.	0.03	0.03	0.04	0.04	0.04	0.04	3.58
60. AIRCRAFT & PARTS	0.50	0.52	0.53	0.55	0.55	0.55	1.99
61. OTHER TRANSPORTATION EQ.	0.82	0.84	0.87	0.89	0.88	0.89	1.53
65. TRANSPORTATION & WAREHOUSING	0.20	0.20	0.21	0.21	0.21	0.21	0.55
77. MISC. SERVICES	1.19	1.19	1.20	1.22	1.24	1.26	1.29
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	1.13	1.15	1.17	1.20	1.22	1.23	1.76
TOTAL, ALL INDUSTRIES	62.12	63.09	64.18	65.87	67.10	67.79	1.76

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE

BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
69. CONSTRUCTION CRAFTS WORKERS, NEC
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
1. LIVESTOCK & PRODUCTS	0.02	0.02	0.02	0.02	0.02	0.02	2.59
2. OTHER AGRICULTURAL PRODUCTS	0.03	0.03	0.03	0.04	0.04	0.04	2.77
3. FORESTRY & FISHERY PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	6.03
4. AGR.,FORESTRY,&FISHERY SERV.	0.01	0.01	0.01	0.01	0.01	0.01	6.85
5. IRON ORE MINING	0.03	0.03	0.03	0.04	0.04	0.04	8.52
6. NONFERROUS METAL MINING	0.03	0.04	0.04	0.05	0.05	0.06	11.24
7. COAL MINING	0.04	0.04	0.05	0.05	0.05	0.06	9.12
8. CRUDE PETROLEUM & N. GAS	0.03	0.04	0.04	0.04	0.04	0.04	4.23
11. NEW CONSTRUCTION	33.95	38.35	41.19	45.44	48.84	51.20	8.56
13. ORDNANCE & ACCESSORIES	2.75	3.12	3.41	3.69	3.90	4.06	8.08
14. FOOD & KINDRED PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	5.18
16. FABRIC,YARN & THREAD MILLS	0.02	0.02	0.02	0.02	0.02	0.02	3.95
19. MISC. FABRICATED TEXTILE PROD.	0.01	0.01	0.01	0.01	0.01	0.01	4.60
20. LUMBER & WOOD PRODUCTS	0.27	0.31	0.35	0.39	0.44	0.47	12.13
21. WOOD CONTAINERS	0.03	0.03	0.04	0.04	0.04	0.05	9.78
23. OTHER FURNITURE & FIXTURES	0.03	0.03	0.03	0.03	0.03	0.03	4.90
24. PAPER & ALLIED PRODUCTS	0.05	0.06	0.06	0.07	0.07	0.07	6.86
25. PAPERBOARD CONTAINERS & BOXES	0.01	0.01	0.01	0.01	0.01	0.01	8.77
26. PRINTING & PUBLISHING	0.01	0.01	0.02	0.02	0.02	0.02	6.39
27. CHEMICALS & PRODUCTS	0.21	0.23	0.25	0.27	0.29	0.30	7.76
28. PLASTICS & SYNTHETIC MATLS.	0.02	0.03	0.03	0.03	0.04	0.04	8.71
31. PET REFINING & REL. PROD.	0.11	0.12	0.13	0.13	0.14	0.15	5.22
32. RUBBER & MISC. PLASTICS PROD.	0.03	0.04	0.04	0.05	0.05	0.06	10.42
35. GLASS & GLASS PRODUCTS	0.04	0.04	0.04	0.05	0.05	0.06	9.99
36. STONE & CLAY PRODUCTS	0.19	0.21	0.23	0.25	0.27	0.29	9.09
37. PRIMARY FERROUS METALS	0.25	0.28	0.30	0.32	0.34	0.36	7.44
38. NONFERROUS METALS	0.11	0.13	0.14	0.16	0.17	0.18	9.80
40. FAB. STRUCTURAL METAL PRODUCTS	0.20	0.22	0.24	0.25	0.27	0.28	7.14
41. SCREW MACHINE PROD.&STAMPINGS	0.04	0.04	0.04	0.05	0.05	0.05	7.68
42. OTHER FAB. METAL PRODUCTS	0.02	0.02	0.02	0.02	0.02	0.02	9.80
43. ENGINES & TURBINES	0.03	0.04	0.04	0.04	0.05	0.05	7.75
45. CONSTR. & MINING MACHINERY	0.01	0.01	0.01	0.01	0.01	0.01	7.25
46. MATERIALS HANDLING MACH. & EQ.	0.01	0.01	0.01	0.02	0.02	0.02	9.12
47. METALWORKING MACH. & EQ.	0.03	0.04	0.04	0.04	0.05	0.05	9.39
49. GENERAL INDUSTRY MACHINERY	0.04	0.04	0.04	0.05	0.05	0.05	7.52
50. MISC. NONELECTRICAL MACH.	0.05	0.06	0.06	0.07	0.07	0.07	7.52
51. OFFICE,COMPUTING & ACCT. MACH.	0.01	0.01	0.01	0.01	0.02	0.02	7.32

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
69. CONSTRUCTION CRAFTS WORKERS, NEC
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
52. SERVICE INDUSTRY MACHINES	0.01	0.01	0.01	0.01	0.02	0.02	13.38
53. ELECTRICAL MACHINERY	0.03	0.03	0.04	0.04	0.04	0.04	9.05
55. ELECTRIC LIGHTING & WIRING EQ.	0.02	0.02	0.02	0.02	0.03	0.03	8.27
56. RADIO,TV, & COMMUNICATION EQ.	0.47	0.54	0.59	0.64	0.67	0.69	8.08
57. ELECTRONIC COMPONENTS & ACCESS.	0.10	0.11	0.13	0.14	0.16	0.16	11.32
58. MISC. ELECTRICAL MACH. & EQ.	0.01	0.01	0.01	0.01	0.01	0.01	9.58
59. MOTOR VEHICLES & EQUIPMENT	0.06	0.07	0.08	0.09	0.11	0.13	17.14
60. AIRCRAFT & PARTS	1.03	1.16	1.28	1.42	1.51	1.55	8.59
61. OTHER TRANSPORTATION EQ.	2.13	2.24	2.32	2.36	2.44	2.52	3.43
62. INSTRUMENTS & SUPPLIES	0.05	0.06	0.07	0.07	0.08	0.08	8.27
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.01	0.01	0.01	0.01	0.02	0.02	8.58
64. MISC. MANUFACTURING	0.02	0.02	0.02	0.02	0.02	0.02	3.73
65. TRANSPORTATION & WAREHOUSING	0.33	0.34	0.35	0.36	0.37	0.37	2.60
68. UTILITIES	0.06	0.07	0.07	0.08	0.08	0.08	6.16
69. WHOLESALE & RETAIL TRADE	0.50	0.57	0.64	0.71	0.78	0.82	10.40
70. FINANCE & INSURANCE	0.01	0.01	0.02	0.02	0.02	0.02	9.39
71. REAL ESTATE & RENTAL	0.38	0.41	0.45	0.48	0.51	0.52	6.76
72. PERSONAL SERVICES EXC. AUTO.	0.16	0.18	0.20	0.22	0.24	0.25	9.10
73. BUSINESS SERVICES	0.21	0.24	0.26	0.29	0.30	0.32	8.26
76. AMUSEMENTS	0.02	0.02	0.03	0.03	0.03	0.03	8.14
77. MISC. SERVICES	0.50	0.51	0.53	0.56	0.58	0.59	3.37
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	25.71	26.56	27.64	29.11	30.18	30.82	3.69
82. GOVERNMENT INDUSTRY	16.13	15.87	16.23	16.73	17.06	17.23	1.34
TOTAL, ALL INDUSTRIES	86.70	92.86	98.07	105.30	110.95	114.68	5.75
TOTAL EMPLOYMENT							
1. LIVESTOCK & PRODUCTS	3.11	3.14	3.09	3.03	3.01	2.99	-0.81
2. OTHER AGRICULTURAL PRODUCTS	22.53	22.62	22.72	22.65	22.60	22.56	0.03
3. FORESTRY & FISHERY PRODUCTS	0.26	0.27	0.29	0.30	0.30	0.30	3.07
4. AGR.,FORESTRY,&FISHERY SERV.	0.47	0.49	0.49	0.50	0.51	0.52	1.76
5. IRON ORE MINING	0.53	0.57	0.61	0.61	0.60	0.59	2.33
6. NONFERROUS METAL MINING	0.56	0.60	0.62	0.64	0.64	0.64	2.65
7. COAL MINING	1.32	1.38	1.44	1.47	1.52	1.56	3.42
8. CRUDE PETROLEUM & N. GAS	0.46	0.46	0.46	0.45	0.44	0.45	-0.56
11. NEW CONSTRUCTION	903.47	921.61	939.50	968.60	991.34	1,004.50	2.14
13. ORDNANCE & ACCESSORIES	4.55	4.67	4.76	4.88	4.95	5.02	1.96
14: FOOD & KINDRED PRODUCTS	1.17	1.18	1.19	1.19	1.18	1.17	0.05
16. FABRIC,YARN & THREAD MILLS	1.33	1.35	1.38	1.39	1.38	1.37	0.60

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
69. CONSTRUCTION CRAFTS WORKERS, NEC
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
19. MISC. FABRICATED TEXTILE PROD.	0.23	0.23	0.24	0.24	0.25	0.25	1.78
20. LUMBER & WOOD PRODUCTS	12.96	14.48	15.49	16.54	17.17	17.46	6.15
21. WOOD CONTAINERS	0.49	0.49	0.50	0.51	0.52	0.52	1.12
23. OTHER FURNITURE & FIXTURES	1.58	1.60	1.66	1.71	1.75	1.79	2.48
24. PAPER & ALLIED PRODUCTS	2.83	2.92	2.96	2.98	2.98	2.98	1.02
25. PAPERBOARD CONTAINERS & BOXES	0.32	0.32	0.33	0.34	0.34	0.34	1.71
26. PRINTING & PUBLISHING	0.85	0.85	0.86	0.87	0.88	0.88	0.76
27. CHEMICALS & PRODUCTS	4.30	4.39	4.46	4.51	4.55	4.57	1.23
28. PLASTICS & SYNTHETIC MATLS.	1.01	1.04	1.08	1.11	1.12	1.13	2.31
31. PET REFINING & REL. PROD.	2.10	2.09	2.11	2.12	2.13	2.13	0.28
32. RUBBER & MISC. PLASTICS PROD.	1.24	1.28	1.33	1.38	1.42	1.43	2.99
35. GLASS & GLASS PRODUCTS	1.59	1.63	1.67	1.70	1.70	1.70	1.23
36. STONE & CLAY PRODUCTS	5.73	5.89	6.03	6.23	6.30	6.27	1.80
37. PRIMARY FERROUS METALS	3.49	3.58	3.68	3.71	3.71	3.68	1.09
38. NONFERROUS METALS	1.33	1.39	1.45	1.50	1.53	1.56	3.18
40. FAB. STRUCTURAL METAL PRODUCTS	4.48	4.47	4.56	4.69	4.77	4.81	1.43
41. SCREW MACHINE PROD.&STAMPINGS	0.60	0.63	0.65	0.67	0.67	0.67	2.15
42. OTHER FAB. METAL PRODUCTS	0.33	0.34	0.35	0.36	0.37	0.38	3.10
43. ENGINES & TURBINES	0.40	0.41	0.43	0.43	0.43	0.44	1.81
45. CONSTR. & MINING MACHINERY	0.56	0.60	0.63	0.65	0.67	0.67	3.64
46. MATERIALS HANDLING MACH. & EQ.	0.20	0.21	0.22	0.23	0.24	0.24	3.62
47. METALWORKING MACH. & EQ.	0.61	0.63	0.67	0.69	0.72	0.73	3.79
49. GENERAL INDUSTRY MACHINERY	0.80	0.82	0.86	0.89	0.90	0.92	2.63
50. MISC. NONELECTRICAL MACH.	0.45	0.46	0.48	0.49	0.49	0.50	2.22
51. OFFICE,COMPUTING & ACCT. MACH.	0.29	0.30	0.31	0.32	0.32	0.33	2.73
52. SERVICE INDUSTRY MACHINES	0.51	0.53	0.56	0.57	0.57	0.57	2.12
53. ELECTRICAL MACHINERY	0.57	0.58	0.60	0.61	0.62	0.63	2.00
55. ELECTRIC LIGHTING & WIRING EQ.	0.39	0.40	0.41	0.42	0.42	0.43	1.72
56. RADIO,TV, & COMMUNICATION EQ.	1.10	1.13	1.16	1.18	1.19	1.21	1.93
57. ELECTRONIC COMPONENTS & ACCESS.	0.44	0.46	0.48	0.50	0.51	0.52	3.61
58. MISC. ELECTRICAL MACH. & EQ.	0.23	0.24	0.25	0.25	0.26	0.26	2.13
59. MOTOR VEHICLES & EQUIPMENT	3.01	3.15	3.25	3.31	3.34	3.36	2.23
60. AIRCRAFT & PARTS	2.06	2.14	2.20	2.27	2.28	2.28	1.99
61. OTHER TRANSPORTATION EQ.	7.33	7.56	7.83	8.00	8.03	8.10	2.01
62. INSTRUMENTS & SUPPLIES	0.47	0.48	0.50	0.52	0.53	0.54	2.81
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.25	0.26	0.27	0.28	0.29	0.30	3.21
64. MISC. MANUFACTURING	1.85	1.83	1.85	1.86	1.85	1.83	-0.22
65. TRANSPORTATION & WAREHOUSING	7.65	7.69	7.72	7.77	7.69	7.55	-0.27
68. UTILITIES	2.77	2.78	2.79	2.79	2.80	2.80	0.21

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
69. CONSTRUCTION CRAFTS WORKERS, NEC
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
69. WHOLESALE & RETAIL TRADE	82.14	85.45	88.77	91.70	94.14	96.65	3.31
70. FINANCE & INSURANCE	1.51	1.54	1.57	1.61	1.66	1.70	2.31
71. REAL ESTATE & RENTAL	13.71	13.77	13.89	13.99	14.04	14.04	0.48
72. PERSONAL SERVICES EXC. AUTO.	8.76	8.96	9.20	9.45	9.69	9.92	2.52
73. BUSINESS SERVICES	4.38	4.50	4.64	4.80	4.94	5.05	2.89
76. AMUSEMENTS	2.32	2.34	2.40	2.45	2.50	2.55	1.98
77. MISC. SERVICES	76.93	77.64	78.56	80.04	81.81	83.81	1.73
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	539.33	548.72	558.77	573.33	584.87	592.87	1.91
82. GOVERNMENT INDUSTRY	183.07	181.64	182.18	183.71	185.31	187.67	0.50
TOTAL, ALL INDUSTRIES	1,951.54	1,985.51	2,021.87	2,074.56	2,116.33	2,145.27	1.91

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
70. MECHANICS, REPAIRERS&INSTALLERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
1. LIVESTOCK & PRODUCTS	0.02	0.02	0.02	0.02	0.02	0.02	2.60
2. OTHER AGRICULTURAL PRODUCTS	0.04	0.03	0.04	0.04	0.04	0.04	2.78
3. FORESTRY & FISHERY PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	5.83
4. AGR.,FORESTRY,&FISHERY SERV.	0.04	0.04	0.04	0.04	0.05	0.05	6.87
5. IRON ORE MINING	0.30	0.35	0.38	0.40	0.42	0.44	7.77
6. NONFERROUS METAL MINING	0.36	0.42	0.47	0.52	0.57	0.60	10.77
7. COAL MINING	0.68	0.77	0.84	0.92	1.00	1.05	9.21
8. CRUDE PETROLEUM & N. GAS	0.75	0.80	0.83	0.87	0.92	0.93	4.26
9. STONE&CLAY MINING & QUARRYING	0.25	0.29	0.31	0.35	0.38	0.41	10.03
10. CHEM&FERTILIZER MIN. MINING	0.05	0.06	0.06	0.07	0.07	0.08	7.90
11. NEW CONSTRUCTION	5.93	6.73	7.25	8.03	8.67	9.12	8.98
13. ORDNANCE & ACCESSORIES	4.08	4.61	5.02	5.42	5.72	5.94	7.80
14. FOOD & KINDRED PRODUCTS	0.65	0.70	0.74	0.79	0.82	0.84	5.26
15. TOBACCO MANUFACTURES	0.01	0.01	0.01	0.01	0.01	0.01	8.04
16. FABRIC,YARN & THREAD MILLS	0.45	0.48	0.51	0.53	0.55	0.57	4.46
17. MISC. TEXTILE GOODS	0.07	0.08	0.09	0.09	0.10	0.10	7.30
18. APPAREL	0.08	0.09	0.09	0.10	0.11	0.11	6.16
19. MISC. FABRICATED TEXTILE PROD.	0.08	0.08	0.09	0.09	0.09	0.10	4.68
20. LUMBER & WOOD PRODUCTS	0.38	0.43	0.46	0.50	0.55	0.58	8.61
21. WOOD CONTAINERS	0.05	0.06	0.07	0.07	0.08	0.08	9.82
22. HOUSEHOLD FURNITURE	0.02	0.02	0.02	0.02	0.02	0.02	3.70
23. OTHER FURNITURE & FIXTURES	0.03	0.03	0.03	0.04	0.04	0.04	4.57
24. PAPER & ALLIED PRODUCTS	0.48	0.52	0.57	0.61	0.64	0.67	6.90
25. PAPERBOARD CONTAINERS & BOXES	0.14	0.16	0.18	0.20	0.21	0.23	9.99
26. PRINTING & PUBLISHING	0.13	0.14	0.15	0.17	0.17	0.18	5.87
27. CHEMICALS & PRODUCTS	1.54	1.70	1.82	1.98	2.12	2.22	7.58
28. PLASTICS & SYNTHETIC MATLS.	0.30	0.34	0.38	0.42	0.45	0.47	9.24
29. DRUGS,CLEANING & TOILET PREP.	0.03	0.03	0.04	0.04	0.04	0.04	4.45
30. PAINTS & ALLIED PRODUCTS	0.06	0.07	0.08	0.08	0.09	0.09	8.19
31. PET REFINING & REL. PROD.	0.44	0.47	0.49	0.53	0.55	0.57	5.23
32. RUBBER & MISC. PLASTICS PROD.	0.64	0.72	0.80	0.90	0.99	1.04	10.33
34. FOOTWEAR & OTHER LEATHER PROD.	0.01	0.01	0.01	0.01	0.01	0.01	4.60
35. GLASS & GLASS PRODUCTS	0.15	0.17	0.18	0.20	0.21	0.22	8.70
36. STONE & CLAY PRODUCTS	0.81	0.92	0.99	1.09	1.16	1.22	8.44
37. PRIMARY FERROUS METALS	2.62	2.91	3.15	3.42	3.65	3.80	7.71
38. NONFERROUS METALS	1.72	1.98	2.18	2.40	2.59	2.72	9.52
39. METAL CONTAINERS	0.10	0.11	0.11	0.12	0.13	0.14	6.61

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
70. MECHANICS, REPAIRERS&INSTALLERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
40. FAB. STRUCTURAL METAL PRODUCTS	0.53	0.59	0.63	0.68	0.73	0.77	7.77
41. SCREW MACHINE PROD.&STAMPINGS	0.64	0.71	0.77	0.83	0.89	0.92	7.70
42. OTHER FAB. METAL PRODUCTS	0.36	0.41	0.45	0.50	0.54	0.57	9.66
43. ENGINES & TURBINES	0.27	0.30	0.33	0.35	0.37	0.39	7.71
44. FARM & GARDEN MACHINERY	0.01	0.01	0.01	0.01	0.01	0.01	8.12
45. CONSTR. & MINING MACHINERY	0.08	0.09	0.10	0.10	0.11	0.11	7.12
46. MATERIALS HANDLING MACH. & EQ.	0.14	0.16	0.17	0.19	0.21	0.21	8.99
47. METALWORKING MACH. & EQ.	0.18	0.21	0.23	0.25	0.27	0.28	9.36
48. SPECIAL INDUSTRY MACHINERY	0.02	0.02	0.02	0.03	0.03	0.03	12.06
49. GENERAL INDUSTRY MACHINERY	0.25	0.28	0.30	0.32	0.34	0.35	7.52
50. MISC. NONELECTRICAL MACH.	0.28	0.30	0.33	0.37	0.39	0.40	7.53
51. OFFICE,COMPUTING & ACCT. MACH.	0.68	0.81	0.91	1.01	1.08	1.14	11.04
52. SERVICE INDUSTRY MACHINES	0.07	0.08	0.09	0.10	0.12	0.13	13.36
53. ELECTRICAL MACHINERY	0.34	0.39	0.43	0.47	0.51	0.53	9.17
54. HOUSEHOLD APPLIANCES	0.01	0.01	0.01	0.01	0.01	0.01	9.50
55. ELECTRIC LIGHTING & WIRING EQ.	0.26	0.29	0.31	0.35	0.37	0.39	8.25
56. RADIO,TV, & COMMUNICATION EQ.	3.29	3.79	4.16	4.51	4.74	4.85	8.03
57. ELECTRONIC COMPONENTS & ACCESS.	2.10	2.50	2.82	3.15	3.44	3.60	11.37
58. MISC. ELECTRICAL MACH. & EQ.	0.14	0.16	0.18	0.20	0.21	0.22	9.57
59. MOTOR VEHICLES & EQUIPMENT	0.57	0.68	0.78	0.92	1.08	1.27	17.14
60. AIRCRAFT & PARTS	13.12	14.94	16.56	18.38	19.78	20.42	9.25
61. OTHER TRANSPORTATION EQ.	1.99	2.10	2.16	2.20	2.27	2.34	3.33
62. INSTRUMENTS & SUPPLIES	0.89	1.00	1.09	1.20	1.28	1.33	8.41
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.20	0.22	0.24	0.26	0.28	0.30	8.50
64. MISC. MANUFACTURING	0.06	0.07	0.08	0.08	0.09	0.09	6.22
65. TRANSPORTATION & WAREHOUSING	8.61	9.18	9.66	10.33	10.81	11.09	5.18
66. COMMUNICATION EXC. RADIO & TV	8.44	8.91	9.42	10.12	10.65	10.83	5.13
67. RADIO & TV BROADCASTING	0.01	0.01	0.02	0.02	0.02	0.02	8.20
68. UTILITIES	3.40	3.72	3.99	4.28	4.49	4.57	6.07
69. WHOLESALE & RETAIL TRADE	6.76	7.72	8.59	9.61	10.50	11.15	10.54
70. FINANCE & INSURANCE	0.09	0.10	0.11	0.12	0.13	0.14	9.81
71. REAL ESTATE & RENTAL	1.35	1.49	1.60	1.73	1.83	1.88	6.80
72. PERSONAL SERVICES EXC. AUTO.	3.35	3.83	4.23	4.69	5.08	5.41	10.03
73. BUSINESS SERVICES	1.90	2.18	2.45	2.75	3.00	3.17	10.74
74. EATING & DRINKING PLACES	0.06	0.06	0.07	0.08	0.08	0.09	9.76
75. AUTOMOBILE REPAIR & SERVICE	2.84	3.14	3.37	3.64	3.87	3.98	6.96
76. AMUSEMENTS	0.30	0.33	0.36	0.40	0.43	0.45	8.68
77. MISC. SERVICES	1.04	1.08	1.13	1.20	1.27	1.30	4.58
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	23.63	24.31	25.38	26.67	27.54	28.00	3.45

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
70. MECHANICS, REPAIRERS&INSTALLERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
82. GOVERNMENT INDUSTRY	101.58	99.67	101.66	104.54	106.35	107.15	1.07
TOTAL, ALL INDUSTRIES	213.37	222.22	233.70	247.80	258.47	264.66	4.40
TOTAL EMPLOYMENT							
1. LIVESTOCK & PRODUCTS	3.26	3.29	3.23	3.18	3.16	3.13	-0.80
2. OTHER AGRICULTURAL PRODUCTS	23.59	23.68	23.80	23.72	23.67	23.63	0.04
3. FORESTRY & FISHERY PRODUCTS	0.27	0.29	0.31	0.32	0.32	0.31	2.87
4. AGR.,FORESTRY,&FISHERY SERV.	1.93	1.98	2.00	2.05	2.07	2.11	1.77
5. IRON ORE MINING	5.88	6.30	6.74	6.66	6.52	6.37	1.61
6. NONFERROUS METAL MINING	6.22	6.56	6.81	6.97	6.91	6.94	2.21
7. COAL MINING	24.18	25.46	26.45	27.15	28.08	28.73	3.50
8. CRUDE PETROLEUM & N. GAS	10.19	10.19	10.17	9.98	9.85	9.93	-0.52
9. STONE&CLAY MINING & QUARRYING	8.03	8.20	8.49	8.85	9.05	9.14	2.62
10. CHEM&FERTILIZER MIN. MINING	2.61	2.67	2.76	2.83	2.85	2.88	2.00
11. NEW CONSTRUCTION	157.80	161.66	165.47	171.25	175.92	178.88	2.54
13. ORDNANCE & ACCESSORIES	6.75	6.89	7.01	7.17	7.26	7.34	1.70
14. FOOD & KINDRED PRODUCTS	96.99	98.48	99.25	99.07	98.27	97.64	0.14
15. TOBACCO MANUFACTURES	5.47	5.51	5.49	5.45	5.43	5.38	-0.34
16. FABRIC,YARN & THREAD MILLS	36.50	37.35	38.10	38.61	38.71	38.52	1.08
17. MISC. TEXTILE GOODS	5.06	5.26	5.49	5.68	5.79	5.84	2.89
18. APPAREL	23.54	23.76	24.32	24.80	24.85	24.88	1.11
19. MISC. FABRICATED TEXTILE PROD.	2.64	2.71	2.78	2.83	2.87	2.90	1.86
20. LUMBER & WOOD PRODUCTS	18.43	19.89	20.58	21.28	21.43	21.17	2.81
21. WOOD CONTAINERS	0.89	0.89	0.91	0.93	0.94	0.94	1.16
22. HOUSEHOLD FURNITURE	3.45	3.64	3.76	3.89	3.97	4.01	3.03
23. OTHER FURNITURE & FIXTURES	2.04	2.05	2.12	2.18	2.22	2.27	2.15
24. PAPER & ALLIED PRODUCTS	25.62	26.44	26.79	26.94	26.98	27.00	1.06
25. PAPERBOARD CONTAINERS & BOXES	6.41	6.66	6.89	7.10	7.26	7.38	2.85
26. PRINTING & PUBLISHING	8.53	8.54	8.58	8.62	8.63	8.64	0.26
27. CHEMICALS & PRODUCTS	32.01	32.60	33.09	33.40	33.58	33.75	1.06
28. PLASTICS & SYNTHETIC MATLS.	12.55	13.07	13.62	14.03	14.29	14.41	2.81
29. DRUGS,CLEANING & TOILET PREP.	9.22	9.31	9.48	9.62	9.65	9.71	1.04
30. PAINTS & ALLIED PRODUCTS	1.19	1.25	1.29	1.34	1.36	1.38	2.97
31. PET REFINING & REL. PROD.	8.19	8.18	8.23	8.31	8.32	8.31	0.29
32. RUBBER & MISC. PLASTICS PROD.	23.41	24.21	25.24	26.07	26.74	27.01	2.90
34. FOOTWEAR & OTHER LEATHER PROD.	2.28	2.27	2.27	2.25	2.21	2.18	-0.86
35. GLASS & GLASS PRODUCTS	6.73	6.80	6.88	6.90	6.84	6.74	0.04
36. STONE & CLAY PRODUCTS	25.17	25.71	26.18	26.85	27.01	26.71	1.19

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
70. MECHANICS, REPAIRERS&INSTALLERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
37. PRIMARY FERROUS METALS	36.77	37.85	38.99	39.43	39.54	39.33	1.35
38. NONFERROUS METALS	20.37	21.17	22.06	22.75	23.15	23.52	2.91
39. METAL CONTAINERS	6.83	6.73	6.75	6.87	6.91	6.95	0.36
40. FAB. STRUCTURAL METAL PRODUCTS	11.79	11.84	12.15	12.57	12.85	13.04	2.03
41. SCREW MACHINE PROD.&STAMPINGS	10.38	10.90	11.26	11.45	11.51	11.55	2.17
42. OTHER FAB. METAL PRODUCTS	7.84	8.08	8.43	8.68	8.87	9.07	2.96
43. ENGINES & TURBINES	3.22	3.33	3.45	3.49	3.50	3.52	1.77
44. FARM & GARDEN MACHINERY	2.73	2.80	2.94	2.98	3.02	3.05	2.28
45. CONSTR. & MINING MACHINERY	6.86	7.25	7.62	7.88	8.08	8.16	3.52
46. MATERIALS HANDLING MACH. & EQ.	2.45	2.53	2.68	2.79	2.86	2.91	3.50
47. METALWORKING MACH. & EQ.	3.52	3.66	3.88	4.04	4.15	4.23	3.76
48. SPECIAL INDUSTRY MACHINERY	2.51	2.57	2.69	2.81	2.88	2.94	3.22
49. GENERAL INDUSTRY MACHINERY	5.61	5.75	6.02	6.18	6.28	6.38	2.62
50. MISC. NONELECTRICAL MACH.	2.44	2.50	2.61	2.67	2.69	2.72	2.23
51. OFFICE,COMPUTING & ACCT. MACH.	17.92	19.42	21.00	22.12	23.12	24.31	6.29
52. SERVICE INDUSTRY MACHINES	3.82	3.97	4.16	4.23	4.24	4.24	2.10
53. ELECTRICAL MACHINERY	6.90	7.03	7.35	7.52	7.61	7.67	2.12
54. HOUSEHOLD APPLIANCES	3.66	3.76	3.86	3.99	4.08	4.14	2.48
55. ELECTRIC LIGHTING & WIRING EQ.	5.44	5.48	5.62	5.76	5.85	5.92	1.70
56. RADIO,TV, & COMMUNICATION EQ.	7.80	7.98	8.22	8.36	8.43	8.56	1.88
57. ELECTRONIC COMPONENTS & ACCESS.	9.59	10.00	10.50	10.93	11.24	11.47	3.65
58. MISC. ELECTRICAL MACH. & EQ.	5.24	5.42	5.63	5.70	5.77	5.82	2.12
59. MOTOR VEHICLES & EQUIPMENT	29.66	31.00	32.05	32.57	32.93	33.11	2.23
60. AIRCRAFT & PARTS	26.28	27.51	28.43	29.50	29.75	29.90	2.61
61. OTHER TRANSPORTATION EQ.	6.86	7.06	7.31	7.47	7.48	7.54	1.92
62. INSTRUMENTS & SUPPLIES	7.61	7.75	8.07	8.40	8.63	8.79	2.94
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	4.55	4.61	4.81	5.02	5.18	5.31	3.14
64. MISC. MANUFACTURING	5.86	5.96	6.17	6.36	6.47	6.53	2.17
65. TRANSPORTATION & WAREHOUSING	202.65	208.86	214.77	221.69	224.74	226.40	2.24
66. COMMUNICATION EXC. RADIO & TV	340.05	342.45	350.52	353.96	361.95	365.02	1.43
67. RADIO & TV BROADCASTING	0.63	0.65	0.67	0.68	0.69	0.69	1.77
68. UTILITIES	158.03	158.34	158.53	158.65	158.94	158.97	0.12
69. WHOLESALE & RETAIL TRADE	1,104.60	1,150.64	1,196.94	1,237.92	1,272.32	1,307.74	3.43
70. FINANCE & INSURANCE	10.21	10.43	10.69	11.01	11.35	11.67	2.70
71. REAL ESTATE & RENTAL	49.25	49.49	49.94	50.34	50.51	50.54	0.52
72. PERSONAL SERVICES EXC. AUTO.	182.88	188.87	195.72	202.64	209.59	216.07	3.39
73. BUSINESS SERVICES	39.22	41.36	43.67	46.26	48.59	50.63	5.24
74. EATING & DRINKING PLACES	3.60	3.66	3.72	3.75	3.78	3.79	1.07
75. AUTOMOBILE REPAIR & SERVICE	196.17	199.35	200.55	200.96	201.62	202.83	0.67

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
70. MECHANICS, REPAIRERS&INSTALLERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
76. AMUSEMENTS	30.55	31.05	31.99	32.82	33.71	34.53	2.48
77. MISC. SERVICES	161.53	164.56	168.03	172.71	177.99	183.82	2.62
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	371.85	381.25	391.57	400.89	408.87	415.83	2.26
82. GOVERNMENT INDUSTRY	353.27	352.42	355.59	361.34	367.11	372.78	1.08
TOTAL, ALL INDUSTRIES	4,076.97	4,179.97	4,293.14	4,395.30	4,482.79	4,559.08	2.26

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE
BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
71. AIRCRAFT MECHANICS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	0.11	0.13	0.14	0.15	0.16	0.16	7.99
43. ENGINES & TURBINES	0.01	0.01	0.01	0.01	0.01	0.02	7.71
56. RADIO,TV, & COMMUNICATION EQ.	0.04	0.04	0.05	0.05	0.05	0.05	7.79
57. ELECTRONIC COMPONENTS & ACCESS.	0.01	0.01	0.01	0.01	0.01	0.01	11.50
60. AIRCRAFT & PARTS	7.64	8.73	9.72	10.84	11.71	12.14	9.71
61. OTHER TRANSPORTATION EQ.	0.01	0.01	0.01	0.01	0.01	0.01	3.42
65. TRANSPORTATION & WAREHOUSING	2.29	2.46	2.61	2.81	2.97	3.06	6.00
69. WHOLESALE & RETAIL TRADE	0.01	0.01	0.01	0.01	0.02	0.02	8.42
72. PERSONAL SERVICES EXC. AUTO.	0.01	0.01	0.01	0.01	0.01	0.01	12.47
73. BUSINESS SERVICES	0.01	0.01	0.01	0.01	0.01	0.01	6.73
77. MISC. SERVICES	0.01	0.01	0.01	0.01	0.01	0.01	1.73
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.47	0.47	0.48	0.50	0.51	0.52	2.10
82. GOVERNMENT INDUSTRY	27.10	26.53	27.01	27.72	28.14	28.30	0.87
TOTAL, ALL INDUSTRIES	37.73	38.46	40.11	42.18	43.66	44.36	3.29
TOTAL EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	0.16	0.19	0.19	0.20	0.20	0.20	1.88
43. ENGINES & TURBINES	0.13	0.13	0.14	0.14	0.14	0.14	1.77
56. RADIO,TV, & COMMUNICATION EQ.	0.09	0.09	0.09	0.09	0.09	0.09	1.66
57. ELECTRONIC COMPONENTS & ACCESS.	0.03	0.03	0.03	0.03	0.03	0.03	3.77
60. AIRCRAFT & PARTS	15.30	16.08	16.69	17.40	17.62	17.78	3.05
61. OTHER TRANSPORTATION EQ.	0.04	0.04	0.04	0.04	0.04	0.04	2.01
65. TRANSPORTATION & WAREHOUSING	53.86	55.97	58.01	60.35	61.64	62.54	3.03
69. WHOLESALE & RETAIL TRADE	1.81	1.84	1.88	1.91	1.92	1.94	1.46
72. PERSONAL SERVICES EXC. AUTO	0.31	0.33	0.35	0.37	0.39	0.41	5.69
73. BUSINESS SERVICES	0.12	0.12	0.12	0.12	0.12	0.12	1.43
77. MISC. SERVICES	1.31	1.29	1.28	1.28	1.29	1.30	-0.18
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	1.36	1.39	1.42	1.47	1.50	1.52	2.25
82. GOVERNMENT INDUSTRY	48.61	48.52	49.00	49.91	50.81	51.50	1.16
TOTAL, ALL INDUSTRIES	124.01	126.91	130.18	134.25	136.74	138.58	2.25

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
72. AUTO MECHANICS&REPAIRERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
4. AGR.,FORESTRY,&FISHERY SERV.	0.01	0.01	0.01	0.01	0.01	0.01	6.87
5. IRON ORE MINING	0.06	0.07	0.07	0.08	0.08	0.08	7.58
6. NONFERROUS METAL MINING	0.05	0.06	0.07	0.07	0.08	0.09	11.55
7. COAL MINING	0.05	0.05	0.06	0.06	0.07	0.07	9.11
8. CRUDE PETROLEUM & N. GAS	0.12	0.13	0.14	0.14	0.15	0.15	4.19
9. STONE&CLAY MINING & QUARRYING	0.06	0.07	0.07	0.08	0.09	0.09	9.98
11. NEW CONSTRUCTION	0.45	0.51	0.55	0.60	0.65	0.67	8.30
13. ORDNANCE & ACCESSORIES	0.47	0.54	0.59	0.64	0.68	0.70	8.31
14. FOOD & KINDRED PRODUCTS	0.09	0.09	0.10	0.10	0.11	0.11	4.30
20. LUMBER & WOOD PRODUCTS	0.08	0.09	0.10	0.11	0.11	0.12	7.45
21. WOOD CONTAINERS	0.01	0.01	0.01	0.01	0.01	0.01	9.84
24. PAPER & ALLIED PRODUCTS	0.02	0.03	0.03	0.03	0.03	0.03	6.49
25. PAPERBOARD CONTAINERS & BOXES	0.01	0.01	0.01	0.01	0.01	0.01	8.80
26. PRINTING & PUBLISHING	0.01	0.01	0.01	0.01	0.01	0.01	6.55
27. CHEMICALS & PRODUCTS	0.08	0.09	0.09	0.10	0.11	0.11	7.60
31. PET REFINING & REL. PROD.	0.04	0.04	0.05	0.05	0.05	0.05	5.17
32. RUBBER & MISC. PLASTICS PROD.	0.01	0.01	0.01	0.01	0.01	0.02	10.07
35. GLASS & GLASS PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	8.38
36. STONE & CLAY PRODUCTS	0.21	0.24	0.26	0.29	0.31	0.33	9.31
37. PRIMARY FERROUS METALS	0.23	0.25	0.27	0.29	0.31	0.32	7.46
38. NONFERROUS METALS	0.19	0.22	0.24	0.26	0.28	0.30	9.81
40. FAB. STRUCTURAL METAL PRODUCTS	0.03	0.03	0.04	0.04	0.04	0.04	7.47
41. SCREW MACHINE PROD.&STAMPINGS	0.04	0.04	0.05	0.05	0.06	0.06	7.68
42. OTHER FAB. METAL PRODUCTS	0.01	0.02	0.02	0.02	0.02	0.02	10.04
43. ENGINES & TURBINES	0.02	0.02	0.02	0.03	0.03	0.03	7.74
45. CONSTR. & MINING MACHINERY	0.01	0.01	0.01	0.01	0.01	0.01	7.25
46. MATERIALS HANDLING MACH. & EQ.	0.01	0.02	0.02	0.02	0.02	0.02	9.12
50. MISC. NONELECTRICAL MACH.	0.02	0.02	0.02	0.03	0.03	0.03	7.55
53. ELECTRICAL MACHINERY	0.01	0.01	0.01	0.01	0.01	0.01	9.30
56. RADIO,TV, & COMMUNICATION EQ.	0.05	0.06	0.07	0.07	0.08	0.08	8.26
57. ELECTRONIC COMPONENTS & ACCESS.	0.01	0.01	0.01	0.01	0.01	0.01	11.38
59. MOTOR VEHICLES & EQUIPMENT	0.10	0.12	0.13	0.16	0.19	0.22	17.14
60. AIRCRAFT & PARTS	0.26	0.29	0.32	0.36	0.38	0.39	8.58
61. OTHER TRANSPORTATION EQ.	0.21	0.22	0.23	0.24	0.25	0.25	3.53
62. INSTRUMENTS & SUPPLIES	0.02	0.02	0.02	0.02	0.02	0.02	8.09
65. TRANSPORTATION & WAREHOUSING	1.42	1.52	1.61	1.73	1.82	1.88	5.82
66. COMMUNICATION EXC. RADIO & TV	0.09	0.10	0.10	0.11	0.12	0.12	5.37

Page 1

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
72. AUTO MECHANICS&REPAIRERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
68. UTILITIES	0.20	0.22	0.24	0.26	0.27	0.28	6.89
69. WHOLESALE & RETAIL TRADE	3.30	3.78	4.21	4.71	5.15	5.47	10.59
71. REAL ESTATE & RENTAL	0.01	0.01	0.01	0.01	0.01	0.01	9.29
72. PERSONAL SERVICES EXC. AUTO.	0.21	0.25	0.28	0.31	0.34	0.36	11.18
73. BUSINESS SERVICES	0.07	0.08	0.09	0.09	0.10	0.10	7.20
75. AUTOMOBILE REPAIR & SERVICE	2.45	2.71	2.91	3.15	3.34	3.44	6.99
77. MISC. SERVICES	0.09	0.09	0.10	0.10	0.10	0.10	2.21
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	5.61	5.94	6.31	6.74	7.06	7.26	5.31
82. GOVERNMENT INDUSTRY	5.00	4.93	5.05	5.21	5.32	5.38	1.48
TOTAL, ALL INDUSTRIES	21.57	23.11	24.67	26.53	28.03	29.02	6.11
TOTAL EMPLOYMENT							
4. AGR.,FORESTRY,&FISHERY SERV.	0.42	0.44	0.44	0.45	0.46	0.46	1.77
5. IRON ORE MINING	1.12	1.20	1.28	1.26	1.24	1.21	1.43
6. NONFERROUS METAL MINING	0.85	0.90	0.94	0.97	0.97	0.98	2.93
7. COAL MINING	1.64	1.72	1.78	1.83	1.89	1.93	3.41
8. CRUDE PETROLEUM & N. GAS	1.69	1.69	1.69	1.65	1.63	1.64	-0.60
9. STONE&CLAY MINING & QUARRYING	1.86	1.90	1.96	2.04	2.09	2.11	2.57
11. NEW CONSTRUCTION	12.05	12.26	12.47	12.83	13.10	13.24	1.90
13. ORDNANCE & ACCESSORIES	0.78	0.80	0.82	0.84	0.86	0.87	2.18
14. FOOD & KINDRED PRODUCTS	13.06	13.14	13.13	12.98	12.76	12.56	-0.78
20. LUMBER & WOOD PRODUCTS	4.04	4.31	4.41	4.51	4.50	4.39	1.72
21. WOOD CONTAINERS	0.13	0.13	0.13	0.14	0.14	0.14	1.18
24. PAPER & ALLIED PRODUCTS	1.28	1.32	1.33	1.33	1.33	1.33	0.67
25. PAPERBOARD CONTAINERS & BOXES	0.25	0.25	0.26	0.27	0.27	0.27	1.74
26. PRINTING & PUBLISHING	0.45	0.45	0.46	0.46	0.47	0.47	0.91
27. CHEMICALS & PRODUCTS	1.63	1.66	1.68	1.70	1.71	1.72	1.08
31. PET REFINING & REL. PROD.	0.75	0.75	0.76	0.76	0.76	0.76	0.23
32. RUBBER & MISC. PLASTICS PROD.	0.36	0.37	0.38	0.40	0.41	0.41	2.65
35. GLASS & GLASS PRODUCTS	0.35	0.35	0.35	0.35	0.35	0.34	-0.25
36. STONE & CLAY PRODUCTS	6.55	6.75	6.93	7.16	7.26	7.24	2.01
37. PRIMARY FERROUS METALS	3.17	3.25	3.34	3.37	3.37	3.35	1.11
38. NONFERROUS METALS	2.21	2.31	2.41	2.49	2.54	2.59	3.19
40. FAB. STRUCTURAL METAL PRODUCTS	0.69	0.70	0.71	0.73	0.75	0.76	1.75
41. SCREW MACHINE PROD.&STAMPINGS	0.65	0.68	0.70	0.71	0.72	0.72	2.15
42. OTHER FAB. METAL PRODUCTS	0.32	0.33	0.35	0.36	0.37	0.38	3.32
43. ENGINES & TURBINES	0.23	0.24	0.25	0.25	0.25	0.26	1.80
45. CONSTR. & MINING MACHINERY	0.66	0.69	0.73	0.76	0.78	0.79	3.65

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
72. AUTO MECHANICS&REPAIRERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
46. MATERIALS HANDLING MACH. & EQ.	0.23	0.24	0.26	0.27	0.27	0.28	3.63
50. MISC. NONELECTRICAL MACH.	0.17	0.18	0.18	0.19	0.19	0.19	2.24
53. ELECTRICAL MACHINERY	0.18	0.18	0.19	0.20	0.20	0.20	2.23
56. RADIO,TV, & COMMUNICATION EQ.	0.12	0.13	0.13	0.13	0.14	0.14	2.10
57. ELECTRONIC COMPONENTS & ACCESS.	0.03	0.03	0.04	0.04	0.04	0.04	3.66
59. MOTOR VEHICLES & EQUIPMENT	5.08	5.31	5.49	5.58	5.64	5.67	2.23
60. AIRCRAFT & PARTS	0.52	0.54	0.55	0.57	0.57	0.57	1.99
61. OTHER TRANSPORTATION EQ.	0.73	0.76	0.79	0.80	0.81	0.82	2.11
62. INSTRUMENTS & SUPPLIES	0.14	0.15	0.15	0.16	0.16	0.16	2.64
65. TRANSPORTATION & WAREHOUSING	33.32	34.56	35.76	37.14	37.87	38.36	2.86
66. COMMUNICATION EXC. RADIO & TV	3.64	3.68	3.77	3.82	3.91	3.95	1.66
68. UTILITIES	9.33	9.43	9.51	9.59	9.68	9.76	0.90
69. WHOLESALE & RETAIL TRADE	540.08	562.91	585.88	606.25	623.39	641.04	3.49
71. REAL ESTATE & RENTAL	0.25	0.26	0.27	0.27	0.28	0.29	2.86
72. PERSONAL SERVICES EXC. AUTO.	11.71	12.24	12.82	13.41	14.01	14.57	4.47
73. BUSINESS SERVICES	1.49	1.52	1.55	1.59	1.62	1.64	1.88
75. AUTOMOBILE REPAIR & SERVICE	169.28	172.07	173.14	173.54	174.15	175.22	0.69
77. MISC. SERVICES	14.37	14.29	14.25	14.31	14.43	14.58	0.29
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	219.48	226.60	233.39	239.42	244.40	249.48	2.60
82. GOVERNMENT INDUSTRY	42.37	42.17	42.44	42.96	43.50	44.15	0.83
TOTAL, ALL INDUSTRIES	1,117.03	1,153.22	1,187.79	1,218.47	1,243.86	1,269.70	2.60

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
73. DATA PROCESSING MACHINE MECHANICS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	0.09	0.11	0.12	0.12	0.13	0.14	8.22
51. OFFICE,COMPUTING & ACCT. MACH.	0.55	0.67	0.76	0.84	0.91	0.97	11.80
53. ELECTRICAL MACHINERY	0.01	0.01	0.01	0.01	0.01	0.01	9.30
55. ELECTRIC LIGHTING & WIRING EQ.	0.01	0.01	0.01	0.01	0.01	0.01	8.22
56. RADIO,TV, & COMMUNICATION EQ.	0.28	0.33	0.36	0.39	0.41	0.42	8.11
57. ELECTRONIC COMPONENTS & ACCESS.	0.05	0.07	0.07	0.08	0.09	0.09	11.37
60. AIRCRAFT & PARTS	0.16	0.18	0.19	0.21	0.23	0.23	8.59
62. INSTRUMENTS & SUPPLIES	0.03	0.03	0.04	0.04	0.04	0.05	8.19
66. COMMUNICATION EXC. RADIO & TV	0.02	0.02	0.02	0.02	0.02	0.02	6.02
69. WHOLESALE & RETAIL TRADE	0.34	0.41	0.48	0.56	0.64	0.70	15.84
72. PERSONAL SERVICES EXC. AUTO.	0.10	0.12	0.14	0.16	0.17	0.18	11.90
73. BUSINESS SERVICES	0.69	0.82	0.96	1.12	1.26	1.37	14.84
77. MISC. SERVICES	0.02	0.02	0.02	0.02	0.02	0.02	5.21
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.01	0.01	0.02	0.02	0.02	0.02	10.81
82. GOVERNMENT INDUSTRY	0.13	0.13	0.13	0.13	0.14	0.14	0.88
TOTAL, ALL INDUSTRIES	2.55	2.99	3.38	3.82	4.19	4.47	11.85
TOTAL EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	0.15	0.16	0.16	0.17	0.17	0.17	2.09
51. OFFICE,COMPUTING & ACCT. MACH.	14.69	16.06	17.50	18.55	19.51	20.62	7.01
53. ELECTRICAL MACHINERY	0.18	0.19	0.20	0.20	0.20	0.21	2.24
55. ELECTRIC LIGHTING & WIRING EQ.	0.19	0.19	0.20	0.20	0.20	0.21	1.67
56. RADIO,TV, & COMMUNICATION EQ.	0.67	0.69	0.71	0.72	0.73	0.74	1.96
57. ELECTRONIC COMPONENTS & ACCESS.	0.25	0.26	0.27	0.28	0.29	0.30	3.65
60. AIRCRAFT & PARTS	0.31	0.32	0.33	0.34	0.34	0.34	1.99
62. INSTRUMENTS & SUPPLIES	0.26	0.27	0.28	0.29	0.29	0.30	2.73
66. COMMUNICATION EXC. RADIO & TV	0.67	0.68	0.70	0.72	0.74	0.75	2.29
69. WHOLESALE & RETAIL TRADE	54.95	60.62	66.36	71.87	77.02	82.22	8.39
72. PERSONAL SERVICES EXC. AUTO.	5.72	6.03	6.36	6.70	7.03	7.35	5.15
73. BUSINESS SERVICES	14.14	15.62	17.18	18.85	20.43	21.89	9.14
77. MISC. SERVICES	2.72	2.79	2.87	2.96	3.07	3.19	3.23
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.32	0.35	0.38	0.41	0.43	0.46	7.61
82. GOVERNMENT INDUSTRY	1.30	1.29	1.28	1.29	1.29	1.30	-0.01
TOTAL, ALL INDUSTRIES	98.64	107.66	116.99	125.80	134.05	142.37	7.61

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE

BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
74. DIESEL MECHANICS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
5. IRON ORE MINING	0.03	0.03	0.03	0.03	0.04	0.04	7.54
6. NONFERROUS METAL MINING	0.03	0.03	0.03	0.04	0.04	0.04	9.73
7. COAL MINING	0.03	0.04	0.04	0.05	0.05	0.05	9.10
8. CRUDE PETROLEUM & N. GAS	0.08	0.08	0.09	0.09	0.09	0.10	4.15
9. STONE&CLAY MINING & QUARRYING	0.02	0.02	0.02	0.02	0.03	0.03	10.31
11. NEW CONSTRUCTION	0.30	0.34	0.37	0.40	0.43	0.45	8.25
43. ENGINES & TURBINES	0.01	0.01	0.01	0.01	0.01	0.01	7.66
46. MATERIALS HANDLING MACH. & EQ.	0.01	0.01	0.01	0.01	0.01	0.01	9.11
50. MISC. NONELECTRICAL MACH.	0.02	0.02	0.02	0.02	0.02	0.03	7.56
53. ELECTRICAL MACHINERY	0.01	0.01	0.01	0.01	0.01	0.01	9.31
56. RADIO,TV, & COMMUNICATION EQ.	0.03	0.03	0.04	0.04	0.04	0.04	8.08
59. MOTOR VEHICLES & EQUIPMENT	0.01	0.02	0.02	0.02	0.03	0.03	17.14
60. AIRCRAFT & PARTS	0.08	0.10	0.10	0.12	0.12	0.13	8.59
65. TRANSPORTATION & WAREHOUSING	2.26	2.44	2.59	2.80	2.96	3.06	6.22
69. WHOLESALE & RETAIL TRADE	0.47	0.53	0.58	0.65	0.70	0.74	9.70
73. BUSINESS SERVICES	0.12	0.13	0.14	0.15	0.16	0.16	6.67
75. AUTOMOBILE REPAIR & SERVICE	0.28	0.31	0.33	0.36	0.38	0.39	6.69
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.10	0.11	0.11	0.12	0.13	0.13	5.92
82. GOVERNMENT INDUSTRY	0.01	0.01	0.01	0.01	0.01	0.01	1.67
TOTAL, ALL INDUSTRIES	3.94	4.31	4.62	5.02	5.33	5.53	7.05
TOTAL EMPLOYMENT							
5. IRON ORE MINING	0.51	0.54	0.58	0.57	0.56	0.54	1.40
6. NONFERROUS METAL MINING	0.45	0.47	0.48	0.49	0.48	0.48	1.25
7. COAL MINING	1.20	1.26	1.31	1.34	1.38	1.41	3.40
8. CRUDE PETROLEUM & N. GAS	1.05	1.05	1.05	1.03	1.01	1.02	-0.63
9. STONE&CLAY MINING & QUARRYING	0.56	0.58	0.60	0.63	0.64	0.65	2.88
11. NEW CONSTRUCTION	8.08	8.21	8.35	8.58	8.76	8.85	1.85
43. ENGINES & TURBINES	0.10	0.11	0.11	0.11	0.11	0.11	1.72
46. MATERIALS HANDLING MACH. & EQ.	0.12	0.12	0.13	0.14	0.14	0.14	3.61
50. MISC. NONELECTRICAL MACH.	0.15	0.16	0.16	0.17	0.17	0.17	2.25
53. ELECTRICAL MACHINERY	0.13	0.13	0.14	0.14	0.15	0.15	2.24
56. RADIO,TV, & COMMUNICATION EQ.	0.07	0.07	0.07	0.07	0.08	0.08	1.94
59. MOTOR VEHICLES & EQUIPMENT	0.77	0.81	0.83	0.85	0.86	0.86	2.23
60. AIRCRAFT & PARTS	0.17	0.18	0.18	0.19	0.19	0.19	2.00
65. TRANSPORTATION & WAREHOUSING	53.28	55.49	57.64	60.08	61.49	62.51	3.25

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
74. DIESEL MECHANICS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
69 WHOLESALE & RETAIL TRADE	76.28	78.80	81.33	83.48	85.18	86.96	2.65
73. BUSINESS SERVICES	2.45	2.48	2.52	2.57	2.61	2.63	1.37
75. AUTOMOBILE REPAIR & SERVICE	19.40	19.66	19.72	19.71	19.73	19.80	0.41
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	3.45	3.55	3.66	3.76	3.82	3.89	2.42
82. GOVERNMENT INDUSTRY	7.70	7.64	7.66	7.71	7.77	7.88	0.46
TOTAL, ALL INDUSTRIES	177.62	183.05	188.33	193.46	197.00	200.21	2.42

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE
BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
75. ELEC. INSTRUMENT&TOOL REPAIRERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
53. ELECTRICAL MACHINERY	0.01	0.01	0.01	0.01	0.01	0.01	8.99
56. RADIO,TV, & COMMUNICATION EQ.	0.44	0.51	0.56	0.61	0.64	0.66	8.19
57. ELECTRONIC COMPONENTS & ACCESS.	0.23	0.28	0.31	0.35	0.38	0.40	11.37
72. PERSONAL SERVICES EXC. AUTO.	0.03	0.03	0.04	0.04	0.05	0.05	9.77
73. BUSINESS SERVICES	0.07	0.07	0.08	0.09	0.09	0.10	7.45
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	3.00	2.95	3.02	3.10	3.16	3.18	1.15
82. GOVERNMENT INDUSTRY	21.94	21.47	21.85	22.42	22.76	22.88	0.84
TOTAL, ALL INDUSTRIES	25.74	25.35	25.89	26.64	27.11	27.29	1.18
TOTAL EMPLOYMENT							
53. ELECTRICAL MACHINERY	0.19	0.20	0.21	0.21	0.21	0.21	1.95
56. RADIO,TV, & COMMUNICATION EQ.	1.05	1.08	1.11	1.13	1.14	1.16	2.04
57. ELECTRONIC COMPONENTS & ACCESS.	1.06	1.11	1.16	1.21	1.24	1.27	3.65
72. PERSONAL SERVICES EXC. AUTO.	1.65	1.70	1.76	1.82	1.87	1.93	3.15
73. BUSINESS SERVICES	1.37	1.40	1.43	1.47	1.50	1.52	2.11
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	3.67	3.72	3.80	3.91	4.02	4.09	2.17
82. GOVERNMENT INDUSTRY	24.60	24.76	25.24	26.00	26.74	27.20	2.03
TOTAL, ALL INDUSTRIES	34.68	35.07	35.85	36.92	37.93	38.61	2.17

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE
BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
76. ELECTRIC MOTOR REPAIRERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
53. ELECTRICAL MACHINERY	0.05	0.06	0.06	0.07	0.07	0.08	9.32
56. RADIO,TV, & COMMUNICATION EQ.	0.02	0.02	0.03	0.03	0.03	0.03	8.40
57. ELECTRONIC COMPONENTS & ACCESS.	0.03	0.03	0.04	0.04	0.04	0.05	11.37
72. PERSONAL SERVICES EXC. AUTO.	0.46	0.53	0.60	0.68	0.75	0.81	12.07
73. BUSINESS SERVICES	0.04	0.04	0.05	0.05	0.06	0.06	7.18
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.09	0.10	0.11	0.12	0.13	0.13	8.70
82. GOVERNMENT INDUSTRY	0.16	0.16	0.16	0.16	0.17	0.17	1.62
TOTAL, ALL INDUSTRIES	0.84	0.95	1.04	1.15	1.25	1.33	9.52
TOTAL EMPLOYMENT							
53. ELECTRICAL MACHINERY	0.97	0.99	1.04	1.06	1.07	1.08	2.25
56. RADIO,TV, & COMMUNICATION EQ.	0.05	0.05	0.05	0.05	0.05	0.05	2.23
57. ELECTRONIC COMPONENTS & ACCESS.	0.12	0.13	0.13	0.14	0.14	0.14	3.65
72. PERSONAL SERVICES EXC. AUTO.	24.92	26.30	27.80	29.32	30.84	32.29	5.32
73. BUSINESS SERVICES	0.83	0.84	0.86	0.88	0.90	0.91	1.86
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	2.62	2.76	2.91	3.06	3.21	3.35	5.06
82. GOVERNMENT INDUSTRY	0.19	0.19	0.20	0.21	0.21	0.22	2.83
TOTAL, ALL INDUSTRIES	29.91	31.47	33.21	34.94	36.65	38.28	5.06

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
77. ENGINEERING EQUIPMENT REPAIRERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
1. LIVESTOCK & PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.02	2.61
2. OTHER AGRICULTURAL PRODUCTS	0.02	0.02	0.02	0.03	0.03	0.03	2.77
4. AGR.,FORESTRY,&FISHERY SERV.	0.02	0.02	0.02	0.02	0.02	0.03	6.86
5. IRON ORE MINING	0.03	0.03	0.04	0.04	0.04	0.04	7.92
6. NONFERROUS METAL MINING	0.02	0.02	0.03	0.03	0.03	0.03	9.75
7. COAL MINING	0.04	0.05	0.05	0.06	0.07	0.07	9.15
8. CRUDE PETROLEUM & N. GAS	0.01	0.01	0.01	0.01	0.01	0.01	4.64
9. STONE&CLAY MINING & QUARRYING	0.02	0.02	0.02	0.02	0.02	0.03	10.24
11. NEW CONSTRUCTION	0.33	0.37	0.40	0.44	0.47	0.49	8.28
13. ORDNANCE & ACCESSORIES	0.15	0.16	0.18	0.19	0.20	0.21	7.28
20. LUMBER & WOOD PRODUCTS	0.02	0.02	0.02	0.03	0.03	0.03	6.92
24. PAPER & ALLIED PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	6.72
27. CHEMICALS & PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	7.29
31. PET REFINING & REL. PROD.	0.01	0.01	0.01	0.01	0.01	0.01	4.70
32. RUBBER & MISC. PLASTICS PROD.	0.03	0.03	0.04	0.04	0.04	0.05	10.28
36. STONE & CLAY PRODUCTS	0.02	0.03	0.03	0.03	0.03	0.03	8.15
37. PRIMARY FERROUS METALS	0.02	0.02	0.02	0.02	0.02	0.03	7.37
38. NONFERROUS METALS	0.02	0.02	0.03	0.03	0.03	0.03	10.04
41. SCREW MACHINE PROD.&STAMPINGS	0.01	0.01	0.01	0.01	0.01	0.01	7.71
42. OTHER FAB. METAL PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	9.59
56. RADIO,TV, & COMMUNICATION EQ.	0.06	0.06	0.07	0.08	0.08	0.08	7.75
57. ELECTRONIC COMPONENTS & ACCESS.	0.02	0.02	0.02	0.02	0.03	0.03	11.40
60. AIRCRAFT & PARTS	0.13	0.14	0.16	0.17	0.19	0.19	8.59
61. OTHER TRANSPORTATION EQ.	0.03	0.03	0.03	0.03	0.03	0.03	3.32
62. INSTRUMENTS & SUPPLIES	0.01	0.02	0.02	0.02	0.02	0.02	8.34
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.01	0.01	0.01	0.01	0.02	0.02	8.49
65. TRANSPORTATION & WAREHOUSING	0.03	0.03	0.03	0.04	0.04	0.04	3.50
68. UTILITIES	0.04	0.04	0.05	0.05	0.05	0.06	6.16
69. WHOLESALE & RETAIL TRADE	0.26	0.29	0.32	0.36	0.39	0.41	9.18
72. PERSONAL SERVICES EXC. AUTO.	0.01	0.01	0.01	0.01	0.01	0.01	10.92
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.09	0.10	0.10	0.11	0.11	0.11	3.96
TOTAL, ALL INDUSTRIES	1.56	1.74	1.89	2.06	2.19	2.28	7.82
TOTAL EMPLOYMENT							
1. LIVESTOCK & PRODUCTS	2.18	2.20	2.17	2.13	2.11	2.09	-0.80
2. OTHER AGRICULTURAL PRODUCTS	15.80	15.86	15.94	15.88	15.85	15.83	0.03

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
77. ENGINEERING EQUIPMENT REPAIRERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
4. AGR.,FORESTRY,&FISHERY SERV.	0.98	1.01	1.02	1.04	1.05	1.07	1.77
5. IRON ORE MINING	0.58	0.62	0.67	0.66	0.65	0.63	1.76
6. NONFERROUS METAL MINING	0.35	0.36	0.37	0.38	0.37	0.37	1.26
7. COAL MINING	1.58	1.66	1.72	1.77	1.83	1.87	3.45
8. CRUDE PETROLEUM & N. GAS	0.12	0.12	0.12	0.12	0.11	0.12	-0.16
9. STONE&CLAY MINING & QUARRYING	0.51	0.52	0.54	0.56	0.58	0.58	2.82
11. NEW CONSTRUCTION	8.77	8.92	9.07	9.32	9.52	9.62	1.88
13. ORDNANCE & ACCESSORIES	0.24	0.24	0.25	0.25	0.25	0.26	1.21
20. LUMBER & WOOD PRODUCTS	1.02	1.08	1.10	1.12	1.11	1.08	1.21
24. PAPER & ALLIED PRODUCTS	0.48	0.49	0.50	0.50	0.50	0.50	0.89
27. CHEMICALS & PRODUCTS	0.12	0.12	0.13	0.13	0.13	0.13	0.79
31. PET REFINING & REL. PROD.	0.19	0.19	0.19	0.19	0.19	0.19	-0.22
32. RUBBER & MISC. PLASTICS PROD.	1.06	1.10	1.14	1.18	1.21	1.22	2.85
36. STONE & CLAY PRODUCTS	0.69	0.70	0.71	0.73	0.73	0.72	0.92
37. PRIMARY FERROUS METALS	0.25	0.25	0.26	0.26	0.26	0.26	1.03
38. NONFERROUS METALS	0.25	0.26	0.27	0.28	0.28	0.29	3.40
41. SCREW MACHINE PROD.&STAMPINGS	0.12	0.13	0.13	0.14	0.14	0.14	2.18
42. OTHER FAB. METAL PRODUCTS	0.18	0.19	0.19	0.20	0.20	0.21	2.90
56. RADIO,TV, & COMMUNICATION EQ.	0.13	0.14	0.14	0.14	0.14	0.15	1.62
57. ELECTRONIC COMPONENTS & ACCESS.	0.08	0.08	0.08	0.09	0.09	0.09	3.68
60. AIRCRAFT & PARTS	0.25	0.26	0.27	0.28	0.28	0.28	2.00
61. OTHER TRANSPORTATION EQ.	0.10	0.10	0.11	0.11	0.11	0.11	1.91
62. INSTRUMENTS & SUPPLIES	0.12	0.12	0.12	0.13	0.13	0.13	2.87
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.24	0.25	0.26	0.27	0.28	0.28	3.13
65. TRANSPORTATION & WAREHOUSING	0.73	0.74	0.75	0.76	0.76	0.76	0.60
68. UTILITIES	1.90	1.90	1.91	1.91	1.92	1.92	0.20
69. WHOLESALE & RETAIL TRADE	42.67	43.85	45.04	46.01	46.73	47.49	2.16
72. PERSONAL SERVICES EXC. AUTO.	0.32	0.33	0.34	0.36	0.37	0.39	4.23
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	3.24	3.30	3.36	3.41	3.45	3.48	1.42
TOTAL, ALL INDUSTRIES	100.88	102.71	104.56	106.12	107.23	108.26	1.42

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
78. INSTRUMENT REPAIRERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
8. CRUDE PETROLEUM & N. GAS	0.05	0.05	0.06	0.06	0.06	0.06	4.66
13. ORDNANCE & ACCESSORIES	0.13	0.14	0.16	0.17	0.18	0.19	8.42
24. PAPER & ALLIED PRODUCTS	0.04	0.05	0.05	0.05	0.06	0.06	6.46
27. CHEMICALS & PRODUCTS	0.18	0.20	0.21	0.23	0.25	0.26	7.83
28. PLASTICS & SYNTHETIC MATLS.	0.04	0.04	0.04	0.05	0.05	0.05	8.71
31. PET REFINING & REL. PROD.	0.08	0.09	0.09	0.10	0.11	0.11	5.25
32. RUBBER & MISC. PLASTICS PROD.	0.02	0.03	0.03	0.03	0.04	0.04	9.87
35. GLASS & GLASS PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	7.99
36. STONE & CLAY PRODUCTS	0.01	0.01	0.02	0.02	0.02	0.02	5.08
37. PRIMARY FERROUS METALS	0.10	0.11	0.12	0.13	0.14	0.14	6.95
38. NONFERROUS METALS	0.05	0.05	0.06	0.06	0.07	0.07	10.00
43. ENGINES & TURBINES	0.01	0.01	0.01	0.01	0.01	0.01	7.76
49. GENERAL INDUSTRY MACHINERY	0.01	0.01	0.01	0.01	0.01	0.02	7.51
53. ELECTRICAL MACHINERY	0.01	0.01	0.01	0.01	0.01	0.01	9.22
56. RADIO,TV, & COMMUNICATION EQ.	0.21	0.24	0.26	0.29	0.30	0.31	8.25
57. ELECTRONIC COMPONENTS & ACCESS.	0.05	0.06	0.07	0.07	0.08	0.09	11.35
59. MOTOR VEHICLES & EQUIPMENT	0.01	0.01	0.01	0.01	0.01	0.02	17.13
60. AIRCRAFT & PARTS	0.87	0.99	1.09	1.20	1.29	1.32	8.59
61. OTHER TRANSPORTATION EQ.	0.03	0.03	0.03	0.03	0.03	0.03	2.88
62. INSTRUMENTS & SUPPLIES	0.16	0.18	0.19	0.21	0.22	0.23	8.05
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.03	0.04	0.04	0.04	0.05	0.05	8.51
68. UTILITIES	0.18	0.20	0.21	0.23	0.24	0.24	5.94
69. WHOLESALE & RETAIL TRADE	0.01	0.01	0.01	0.01	0.01	0.01	8.33
72. PERSONAL SERVICES EXC. AUTO.	0.01	0.01	0.01	0.01	0.01	0.01	12.52
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.06	0.06	0.06	0.07	0.07	0.07	2.74
82. GOVERNMENT INDUSTRY	5.00	4.93	5.05	5.22	5.33	5.39	1.51
TOTAL, ALL INDUSTRIES	7.37	7.58	7.94	8.37	8.68	8.85	3.73
TOTAL EMPLOYMENT							
8. CRUDE PETROLEUM & N GAS	0.69	0.69	0.70	0.69	0.68	0.69	-0.15
13. ORDNANCE & ACCESSORIES	0.21	0.21	0.22	0.23	0.23	0.23	2.28
24. PAPER & ALLIED PRODUCTS	2.26	2.33	2.35	2.35	2.34	2.34	0.64
27. CHEMICALS & PRODUCTS	3.69	3.77	3.83	3.88	3.91	3.93	1.30
28. PLASTICS & SYNTHETIC MATLS.	1.48	1.54	1.59	1.63	1.65	1.66	2.31
31. PET REFINING & REL. PROD.	1.55	1.55	1.56	1.58	1.58	1.58	0.31
32. RUBBER & MISC. PLASTICS PROD.	0.88	0.91	0.94	0.97	0.99	1.00	2.47

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
78. INSTRUMENT REPAIRERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
35. GLASS & GLASS PRODUCTS	0.36	0.37	0.37	0.37	0.36	0.35	-0.61
36. STONE & CLAY PRODUCTS	0.41	0.40	0.40	0.39	0.38	0.37	-1.94
37. PRIMARY FERROUS METALS	1.42	1.45	1.48	1.49	1.48	1.46	0.63
38. NONFERROUS METALS	0.54	0.56	0.59	0.61	0.62	0.63	3.36
43. ENGINES & TURBINES	0.09	0.10	0.10	0.10	0.10	0.10	1.82
49. GENERAL INDUSTRY MACHINERY	0.25	0.25	0.26	0.27	0.28	0.28	2.62
53. ELECTRICAL MACHINERY	0.17	0.17	0.18	0.18	0.18	0.19	2.16
56. RADIO,TV, & COMMUNICATION EQ.	0.49	0.50	0.52	0.53	0.54	0.55	2.10
57. ELECTRONIC COMPONENTS & ACCESS.	0.23	0.24	0.25	0.26	0.27	0.27	3.63
59. MOTOR VEHICLES & EQUIPMENT	0.35	0.37	0.38	0.39	0.39	0.40	2.22
60. AIRCRAFT & PARTS	1.75	1.82	1.87	1.93	1.93	1.93	2.00
61. OTHER TRANSPORTATION EQ.	0.09	0.10	0.10	0.10	0.10	0.10	1.48
62. INSTRUMENTS & SUPPLIES	1.34	1.36	1.41	1.46	1.50	1.52	2.59
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.78	0.79	0.83	0.86	0.89	0.91	3.14
68. UTILITIES	8.44	8.45	8.45	8.44	8.45	8.44	0.00
69. WHOLESALE & RETAIL TRADE	0.95	0.97	0.98	1.00	1.01	1.01	1.37
72. PERSONAL SERVICES EXC. AUTO.	0.42	0.45	0.48	0.51	0.53	0.56	5.73
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.27	0.28	0.28	0.29	0.29	0.29	1.35
82. GOVERNMENT INDUSTRY	8.45	8.51	8.68	8.93	9.18	9.38	2.10
TOTAL, ALL INDUSTRIES	39.07	39.65	40.35	41.01	41.46	41.78	1.35

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
79. MAINT. MECH&REPAIRERS GEN UTIL
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
5. IRON ORE MINING	0.08	0.09	0.10	0.11	0.11	0.12	7.80
6. NONFERROUS METAL MINING	0.13	0.16	0.18	0.20	0.21	0.23	10.91
7. COAL MINING	0.17	0.19	0.21	0.23	0.25	0.26	9.19
8. CRUDE PETROLEUM & N. GAS	0.45	0.48	0.50	0.52	0.55	0.56	4.22
9. STONE&CLAY MINING & QUARRYING	0.13	0.14	0.15	0.17	0.19	0.20	9.92
10. CHEM&FERTILIZER MIN. MINING	0.03	0.03	0.03	0.03	0.04	0.04	7.90
11. NEW CONSTRUCTION	0.82	0.94	1.01	1.12	1.21	1.28	9.18
13. ORDNANCE & ACCESSORIES	1.63	1.84	2.00	2.16	2.27	2.36	7.70
14. FOOD & KINDRED PRODUCTS	0.51	0.56	0.59	0.63	0.65	0.67	5.48
16. FABRIC,YARN & THREAD MILLS	0.10	0.11	0.11	0.12	0.13	0.13	5.56
17. MISC. TEXTILE GOODS	0.04	0.04	0.05	0.05	0.06	0.06	7.59
18. APPAREL	0.01	0.01	0.01	0.02	0.02	0.02	5.83
19. MISC. FABRICATED TEXTILE PROD.	0.03	0.03	0.03	0.03	0.03	0.04	4.69
20. LUMBER & WOOD PRODUCTS	0.20	0.23	0.25	0.27	0.29	0.31	9.23
21. WOOD CONTAINERS	0.04	0.05	0.05	0.06	0.06	0.07	9.80
22. HOUSEHOLD FURNITURE	0.01	0.02	0.02	0.02	0.02	0.02	3.70
23. OTHER FURNITURE & FIXTURES	0.03	0.03	0.03	0.03	0.03	0.03	4.58
24. PAPER & ALLIED PRODUCTS	0.24	0.26	0.28	0.30	0.32	0.33	7.06
25. PAPERBOARD CONTAINERS & BOXES	0.12	0.14	0.15	0.17	0.18	0.20	10.19
26. PRINTING & PUBLISHING	0.11	0.12	0.13	0.14	0.14	0.15	5.82
27. CHEMICALS & PRODUCTS	1.07	1.18	1.27	1.37	1.47	1.54	7.47
28. PLASTICS & SYNTHETIC MATLS.	0.21	0.24	0.26	0.29	0.31	0.33	9.48
29. DRUGS,CLEANING & TOILET PREP.	0.02	0.02	0.02	0.02	0.02	0.02	4.45
30. PAINTS & ALLIED PRODUCTS	0.05	0.06	0.07	0.07	0.08	0.08	8.20
31. PET REFINING & REL. PROD.	0.28	0.30	0.31	0.33	0.35	0.36	5.25
32. RUBBER & MISC. PLASTICS PROD.	0.53	0.59	0.66	0.74	0.81	0.86	10.35
35. GLASS & GLASS PRODUCTS	0.10	0.11	0.12	0.14	0.15	0.16	8.96
36. STONE & CLAY PRODUCTS	0.49	0.56	0.60	0.66	0.71	0.74	8.33
37. PRIMARY FERROUS METALS	1.38	1.54	1.67	1.83	1.95	2.04	8.19
38. NONFERROUS METALS	1.15	1.32	1.45	1.60	1.72	1.80	9.33
39. METAL CONTAINERS	0.07	0.08	0.08	0.09	0.10	0.10	6.60
40. FAB. STRUCTURAL METAL PRODUCTS	0.37	0.42	0.45	0.48	0.51	0.54	7.81
41. SCREW MACHINE PROD.&STAMPINGS	0.41	0.46	0.49	0.54	0.57	0.60	7.70
42. OTHER FAB. METAL PRODUCTS	0.27	0.31	0.34	0.37	0.40	0.43	9.64
43. ENGINES & TURBINES	0.11	0.13	0.14	0.15	0.15	0.16	7.71
44. FARM & GARDEN MACHINERY	0.01	0.01	0.01	0.01	0.01	0.01	8.11
45. CONSTR. & MINING MACHINERY	0.04	0.05	0.05	0.05	0.06	0.06	7.25

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
79. MAINT. MECH&REPAIRERS GEN UTIL
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
46. MATERIALS HANDLING MACH. & EQ.	0.07	0.08	0.09	0.10	0.11	0.11	9.12
47. METALWORKING MACH. & EQ.	0.13	0.15	0.17	0.19	0.20	0.21	9.36
48. SPECIAL INDUSTRY MACHINERY	0.01	0.01	0.01	0.02	0.02	0.02	12.05
49. GENERAL INDUSTRY MACHINERY	0.15	0.17	0.18	0.20	0.21	0.22	7.51
50. MISC. NONELECTRICAL MACH.	0.19	0.20	0.22	0.25	0.26	0.27	7.53
51. OFFICE,COMPUTING & ACCT. MACH.	0.07	0.08	0.09	0.10	0.10	0.10	7.32
52. SERVICE INDUSTRY MACHINES	0.04	0.04	0.05	0.05	0.06	0.07	13.37
53. ELECTRICAL MACHINERY	0.19	0.22	0.24	0.26	0.28	0.29	9.09
54. HOUSEHOLD APPLIANCES	0.01	0.01	0.01	0.01	0.01	0.01	9.50
55. ELECTRIC LIGHTING & WIRING EQ.	0.18	0.20	0.22	0.24	0.26	0.27	8.25
56. RADIO,TV, & COMMUNICATION EQ.	1.58	1.81	1.99	2.15	2.27	2.32	8.00
57. ELECTRONIC COMPONENTS & ACCESS.	1.52	1.81	2.04	2.28	2.49	2.61	11.37
58. MISC. ELECTRICAL MACH. & EQ.	0.10	0.11	0.12	0.14	0.15	0.16	9.57
59. MOTOR VEHICLES & EQUIPMENT	0.26	0.31	0.36	0.42	0.50	0.58	17.14
60. AIRCRAFT & PARTS	2.30	2.60	2.86	3.16	3.38	3.47	8.59
61. OTHER TRANSPORTATION EQ.	0.88	0.93	0.96	0.98	1.01	1.04	3.35
62. INSTRUMENTS & SUPPLIES	0.57	0.64	0.70	0.77	0.82	0.85	8.53
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.10	0.11	0.11	0.13	0.14	0.14	8.53
64. MISC. MANUFACTURING	0.05	0.05	0.05	0.06	0.06	0.06	5.84
65. TRANSPORTATION & WAREHOUSING	0.70	0.74	0.78	0.82	0.86	0.87	4.33
66. COMMUNICATION EXC. RADIO & TV	0.05	0.06	0.06	0.07	0.07	0.07	5.51
68. UTILITIES	0.47	0.52	0.56	0.60	0.63	0.64	6.13
69. WHOLESALE & RETAIL TRADE	0.69	0.78	0.86	0.96	1.03	1.09	9.61
70. FINANCE & INSURANCE	0.07	0.08	0.09	0.10	0.11	0.12	9.85
71. REAL ESTATE & RENTAL	1.33	1.46	1.58	1.71	1.80	1.85	6.78
72. PERSONAL SERVICES EXC. AUTO.	1.06	1.21	1.33	1.47	1.59	1.69	9.67
73. BUSINESS SERVICES	0.49	0.55	0.61	0.68	0.73	0.77	9.39
74. EATING & DRINKING PLACES	0.04	0.04	0.05	0.05	0.06	0.06	9.74
75. AUTOMOBILE REPAIR & SERVICE	0.08	0.09	0.10	0.11	0.11	0.12	7.23
76. AMUSEMENTS	0.18	0.20	0.22	0.24	0.26	0.28	8.95
77. MISC. SERVICES	0.76	0.79	0.83	0.89	0.94	0.97	5.16
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.52	0.55	0.58	0.61	0.64	0.65	4.65
82. GOVERNMENT INDUSTRY	4.62	4.55	4.66	4.81	4.91	4.97	1.46
TOTAL, ALL INDUSTRIES	30.94	34.02	36.67	39.75	42.24	43.83	7.22
TOTAL EMPLOYMENT							
5. IRON ORE MINING	1.57	1.68	1.80	1.78	1.74	1.70	1.64
6. NONFERROUS METAL MINING	2.32	2.44	2.54	2.60	2.58	2.60	2.34

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
79. MAINT. MECH&REPAIRERS GEN UTIL
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
7. COAL MINING	6.07	6.39	6.64	6.81	7.05	7.21	3.49
8. CRUDE PETROLEUM & N. GAS	6.12	6.12	6.10	5.99	5.90	5.95	-0.56
9. STONE&CLAY MINING & QUARRYING	4.00	4.08	4.22	4.40	4.49	4.53	2.52
10. CHEM&FERTILIZER MIN. MINING	1.31	1.35	1.39	1.42	1.44	1.45	2.00
11. NEW CONSTRUCTION	21.95	22.53	23.11	23.96	24.65	25.11	2.72
13. ORDNANCE & ACCESSORIES	2.69	2.75	2.79	2.85	2.89	2.91	1.61
14. FOOD & KINDRED PRODUCTS	76.81	78.16	78.93	78.95	78.48	78.14	0.35
16. FABRIC,YARN & THREAD MILLS	8.00	8.27	8.53	8.73	8.85	8.89	2.15
17. MISC. TEXTILE GOODS	2.80	2.92	3.05	3.16	3.23	3.27	3.18
18. APPAREL	3.57	3.59	3.66	3.72	3.72	3.71	0.80
19. MISC. FABRICATED TEXTILE PROD.	0.98	1.00	1.03	1.05	1.06	1.07	1.86
20. LUMBER & WOOD PRODUCTS	9.66	10.49	10.92	11.36	11.50	11.42	3.40
21. WOOD CONTAINERS	0.68	0.68	0.70	0.71	0.72	0.72	1.15
22. HOUSEHOLD FURNITURE	2.49	2.63	2.71	2.81	2.87	2.89	3.03
23. OTHER FURNITURE & FIXTURES	1.61	1.62	1.67	1.72	1.76	1.79	2.16
24. PAPER & ALLIED PRODUCTS	12.63	13.05	13.24	13.34	13.37	13.40	1.20
25. PAPERBOARD CONTAINERS & BOXES	5.49	5.72	5.93	6.12	6.26	6.38	3.04
26. PRINTING & PUBLISHING	7.10	7.11	7.14	7.17	7.18	7.18	0.22
27. CHEMICALS & PRODUCTS	22.30	22.68	23.00	23.19	23.29	23.39	0.96
28. PLASTICS & SYNTHETIC MATLS.	8.67	9.06	9.46	9.76	9.96	10.07	3.04
29. DRUGS,CLEANING & TOILET PREP.	5.61	5.66	5.76	5.85	5.87	5.90	1.04
30. PAINTS & ALLIED PRODUCTS	1.04	1.09	1.13	1.17	1.19	1.20	2.98
31. PET REFINING & REL. PROD.	5.19	5.18	5.21	5.26	5.27	5.27	0.32
32. RUBBER & MISC. PLASTICS PROD.	19.31	19.98	20.83	21.51	22.07	22.30	2.92
35. GLASS & GLASS PRODUCTS	4.61	4.68	4.75	4.77	4.74	4.68	0.29
36. STONE & CLAY PRODUCTS	15.32	15.63	15.90	16.30	16.37	16.18	1.09
37. PRIMARY FERROUS METALS	19.35	20.02	20.71	21.04	21.18	21.15	1.80
38. NONFERROUS METALS	13.62	14.13	14.70	15.13	15.38	15.60	2.74
39. METAL CONTAINERS	4.96	4.89	4.91	4.99	5.03	5.05	0.36
40. FAB. STRUCTURAL METAL PRODUCTS	8.35	8.39	8.61	8.91	9.11	9.25	2.06
41. SCREW MACHINE PROD.&STAMPINGS	6.70	7.04	7.27	7.39	7.43	7.46	2.17
42. OTHER FAB. METAL PRODUCTS	5.85	6.03	6.29	6.48	6.62	6.77	2.95
43. ENGINES & TURBINES	1.33	1.38	1.43	1.44	1.45	1.46	1.77
44. FARM & GARDEN MACHINERY	1.88	1.93	2.02	2.05	2.08	2.10	2.27
45. CONSTR. & MINING MACHINERY	3.52	3.72	3.92	4.05	4.16	4.21	3.64
46. MATERIALS HANDLING MACH. & EQ.	1.26	1.30	1.38	1.43	1.47	1.50	3.62
47. METALWORKING MACH. & EQ.	2.60	2.71	2.87	2.99	3.07	3.13	3.76
48. SPECIAL INDUSTRY MACHINERY	1.62	1.65	1.73	1.81	1.85	1.89	3.21
49. GENERAL INDUSTRY MACHINERY	3.48	3.57	3.73	3.83	3.90	3.96	2.62

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
79. MAINT. MECH&REPAIRERS GEN UTIL
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
50. MISC. NONELECTRICAL MACH.	1.64	1.68	1.75	1.79	1.80	1.83	2.23
51. OFFICE,COMPUTING & ACCT. MACH.	1.95	2.02	2.11	2.15	2.18	2.23	2.73
52. SERVICE INDUSTRY MACHINES	1.99	2.07	2.17	2.20	2.21	2.21	2.10
53. ELECTRICAL MACHINERY	3.81	3.88	4.05	4.14	4.19	4.22	2.04
54. HOUSEHOLD APPLIANCES	2.22	2.28	2.34	2.42	2.48	2.51	2.48
55. ELECTRIC LIGHTING & WIRING EQ.	3.77	3.79	3.89	3.99	4.05	4.10	1.70
56. RADIO,TV, & COMMUNICATION EQ.	3.73	3.82	3.93	4.00	4.03	4.09	1.85
57. ELECTRONIC COMPONENTS & ACCESS.	6.94	7.24	7.60	7.91	8.13	8.30	3.65
58. MISC. ELECTRICAL MACH. & EQ.	3.66	3.79	3.94	3.99	4.04	4.07	2.12
59. MOTOR VEHICLES & EQUIPMENT	13.62	14.24	14.72	14.96	15.12	15.21	2.23
60. AIRCRAFT & PARTS	4.60	4.78	4.91	5.07	5.08	5.08	2.00
61. OTHER TRANSPORTATION EQ.	3.05	3.14	3.25	3.32	3.33	3.36	1.94
62. INSTRUMENTS & SUPPLIES	4.86	4.96	5.17	5.39	5.55	5.65	3.06
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	2.21	2.24	2.34	2.44	2.52	2.58	3.17
64. MISC. MANUFACTURING	4.18	4.24	4.37	4.49	4.55	4.58	1.81
65. TRANSPORTATION & WAREHOUSING	16.58	16.94	17.28	17.69	17.79	17.78	1.41
66. COMMUNICATION EXC. RADIO & TV	2.16	2.19	2.25	2.28	2.34	2.37	1.80
68. UTILITIES	22.07	22.13	22.17	22.20	22.25	22.27	0.18
69. WHOLESALE & RETAIL TRADE	112.68	116.29	119.91	122.98	125.39	127.89	2.57
70. FINANCE & INSURANCE	8.71	8.90	9.12	9.40	9.69	9.96	2.73
71. REAL ESTATE & RENTAL	48.52	48.75	49.19	49.57	49.73	49.75	0.50
72. PERSONAL SERVICES EXC. AUTO.	58.01	59.70	61.65	63.63	65.61	67.45	3.06
73. BUSINESS SERVICES	10.07	10.47	10.91	11.42	11.86	12.23	3.96
74. EATING & DRINKING PLACES	2.35	2.39	2.43	2.45	2.47	2.48	1.05
75. AUTOMOBILE REPAIR & SERVICE	5.69	5.80	5.85	5.87	5.91	5.96	0.92
76. AMUSEMENTS	18.44	18.80	19.42	19.97	20.56	21.11	2.74
77. MISC. SERVICES	117.04	119.96	123.21	127.33	131.92	136.91	3.19
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	11.35	11.60	11.88	12.13	12.33	12.50	1.96
82. GOVERNMENT INDUSTRY	88.91	88.33	88.70	89.55	90.43	91.69	0.62
TOTAL, ALL INDUSTRIES	922.21	942.65	965.15	985.64	1,001.63	1,016.03	1.96

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE
BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
80. MARINE MECHANICS&REPAIRERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
61. OTHER TRANSPORTATION EQ.	0.25	0.26	0.27	0.28	0.29	0.30	3.43
65. TRANSPORTATION & WAREHOUSING	0.15	0.16	0.16	0.17	0.18	0.18	2.57
69. WHOLESALE & RETAIL TRADE	0.02	0.03	0.03	0.03	0.04	0.04	9.53
72. PERSONAL SERVICES EXC. AUTO.	0.01	0.01	0.01	0.01	0.01	0.01	12.06
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.04	0.04	0.04	0.05	0.05	0.05	1.71
82. GOVERNMENT INDUSTRY	0.88	0.86	0.88	0.90	0.92	0.92	0.85
TOTAL, ALL INDUSTRIES	1.36	1.37	1.40	1.44	1.47	1.49	1.81
TOTAL EMPLOYMENT							
61. OTHER TRANSPORTATION EQ.	0.86	0.89	0.92	0.94	0.94	0.95	2.02
65. TRANSPORTATION & WAREHOUSING	3.63	3.65	3.66	3.69	3.65	3.58	-0.30
69. WHOLESALE & RETAIL TRADE	4.01	4.13	4.26	4.36	4.45	4.53	2.49
72. PERSONAL SERVICES EXC. AUTO.	0.32	0.34	0.36	0.38	0.40	0.41	5.30
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.30	0.30	0.31	0.31	0.32	0.32	1.39
82. GOVERNMENT INDUSTRY	1.66	1.65	1.67	1.70	1.73	1.75	1.11
TOTAL, ALL INDUSTRIES	10.78	10.97	11.18	11.38	11.48	11.55	1.39

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
81. MILLWRIGHTS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
5. IRON ORE MINING	0.01	0.01	0.01	0.01	0.01	0.01	7.67
6. NONFERROUS METAL MINING	0.03	0.04	0.04	0.05	0.05	0.05	10.47
11. NEW CONSTRUCTION	0.58	0.66	0.71	0.79	0.85	0.89	8.92
13. ORDNANCE & ACCESSORIES	0.49	0.55	0.60	0.64	0.67	0.69	7.05
14. FOOD & KINDRED PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	4.85
16. FABRIC,YARN & THREAD MILLS	0.01	0.01	0.01	0.01	0.01	0.01	5.63
20. LUMBER & WOOD PRODUCTS	0.06	0.07	0.07	0.08	0.08	0.09	8.62
24. PAPER & ALLIED PRODUCTS	0.15	0.17	0.18	0.20	0.21	0.21	6.88
25. PAPERBOARD CONTAINERS & BOXES	0.01	0.01	0.01	0.01	0.01	0.01	8.77
27. CHEMICALS & PRODUCTS	0.13	0.14	0.15	0.16	0.18	0.19	8.29
28. PLASTICS & SYNTHETIC MATLS.	0.03	0.04	0.04	0.04	0.05	0.05	8.70
31. PET REFINING & REL. PROD.	0.01	0.01	0.01	0.01	0.01	0.01	4.79
32. RUBBER & MISC. PLASTICS PROD.	0.03	0.03	0.04	0.04	0.04	0.05	10.41
35. GLASS & GLASS PRODUCTS	0.02	0.02	0.02	0.03	0.03	0.03	8.38
36. STONE & CLAY PRODUCTS	0.03	0.04	0.04	0.04	0.04	0.05	7.35
37. PRIMARY FERROUS METALS	0.77	0.85	0.91	0.99	1.05	1.09	7.10
38. NONFERROUS METALS	0.23	0.27	0.29	0.33	0.35	0.37	9.82
39. METAL CONTAINERS	0.01	0.01	0.01	0.02	0.02	0.02	6.60
40. FAB. STRUCTURAL METAL PRODUCTS	0.08	0.09	0.10	0.10	0.11	0.12	7.78
41. SCREW MACHINE PROD.&STAMPINGS	0.16	0.18	0.19	0.21	0.22	0.23	7.69
42. OTHER FAB. METAL PRODUCTS	0.04	0.05	0.06	0.06	0.07	0.07	9.66
43. ENGINES & TURBINES	0.04	0.05	0.05	0.05	0.06	0.06	7.71
45. CONSTR. & MINING MACHINERY	0.01	0.01	0.01	0.01	0.01	0.01	7.25
46. MATERIALS HANDLING MACH. & EQ.	0.02	0.02	0.02	0.02	0.02	0.02	9.12
47. METALWORKING MACH. & EQ.	0.03	0.04	0.04	0.05	0.05	0.05	9.35
49. GENERAL INDUSTRY MACHINERY	0.04	0.04	0.05	0.05	0.05	0.06	7.52
50. MISC. NONELECTRICAL MACH.	0.03	0.04	0.04	0.04	0.05	0.05	7.52
52. SERVICE INDUSTRY MACHINES	0.01	0.01	0.01	0.01	0.01	0.02	13.36
53. ELECTRICAL MACHINERY	0.05	0.05	0.06	0.06	0.07	0.07	9.28
55. ELECTRIC LIGHTING & WIRING EQ.	0.02	0.02	0.02	0.03	0.03	0.03	8.25
56. RADIO,TV, & COMMUNICATION EQ.	0.35	0.40	0.44	0.48	0.50	0.51	8.00
57. ELECTRONIC COMPONENTS & ACCESS.	0.08	0.10	0.11	0.12	0.13	0.14	11.36
58. MISC. ELECTRICAL MACH. & EQ.	0.02	0.02	0.03	0.03	0.03	0.03	9.57
59. MOTOR VEHICLES & EQUIPMENT	0.17	0.21	0.23	0.28	0.32	0.38	17.14
60. AIRCRAFT & PARTS	0.51	0.57	0.63	0.70	0.74	0.76	8.60
61. OTHER TRANSPORTATION EQ.	0.13	0.13	0.14	0.14	0.14	0.15	2.92
62. INSTRUMENTS & SUPPLIES	0.04	0.04	0.04	0.05	0.05	0.05	8.27

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
81. MILLWRIGHTS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
65. TRANSPORTATION & WAREHOUSING	0.02	0.02	0.02	0.02	0.02	0.03	6.41
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.04	0.04	0.04	0.05	0.05	0.05	5.59
82. GOVERNMENT INDUSTRY	0.14	0.14	0.14	0.15	0.15	0.15	0.92
TOTAL, ALL INDUSTRIES	4.68	5.25	5.70	6.22	6.65	6.94	8.18
TOTAL EMPLOYMENT							
5. IRON ORE MINING	0.17	0.19	0.20	0.20	0.19	0.19	1.52
6. NONFERROUS METAL MINING	0.55	0.58	0.60	0.61	0.60	0.60	1.93
11. NEW CONSTRUCTION	15.52	15.89	16.25	16.81	17.26	17.54	2.48
13. ORDNANCE & ACCESSORIES	0.81	0.82	0.83	0.85	0.85	0.85	0.99
14. FOOD & KINDRED PRODUCTS	0.88	0.89	0.90	0.89	0.88	0.87	-0.25
16. FABRIC,YARN & THREAD MILLS	0.49	0.51	0.52	0.54	0.54	0.55	2.22
20. LUMBER & WOOD PRODUCTS	2.86	3.08	3.19	3.30	3.32	3.28	2.82
24. PAPER & ALLIED PRODUCTS	8.24	8.51	8.62	8.66	8.67	8.68	1.03
25. PAPERBOARD CONTAINERS & BOXES	0.30	0.31	0.32	0.32	0.32	0.33	1.71
27. CHEMICALS & PRODUCTS	2.60	2.66	2.72	2.77	2.80	2.83	1.73
28. PLASTICS & SYNTHETIC MATLS.	1.36	1.40	1.46	1.49	1.51	1.52	2.31
31. PET REFINING & REL. PROD.	0.16	0.15	0.16	0.16	0.16	0.15	-0.12
32. RUBBER & MISC. PLASTICS PROD.	1.04	1.07	1.12	1.16	1.19	1.20	2.97
35. GLASS & GLASS PRODUCTS	0.85	0.86	0.87	0.87	0.86	0.84	-0.25
36. STONE & CLAY PRODUCTS	1.00	1.01	1.02	1.03	1.03	1.01	0.18
37. PRIMARY FERROUS METALS	10.82	11.07	11.34	11.40	11.37	11.25	0.78
38. NONFERROUS METALS	2.74	2.85	2.98	3.08	3.14	3.20	3.20
39. METAL CONTAINERS	0.89	0.88	0.88	0.90	0.90	0.91	0.35
40. FAB. STRUCTURAL METAL PRODUCTS	1.81	1.82	1.86	1.93	1.97	2.00	2.03
41. SCREW MACHINE PROD.&STAMPINGS	2.57	2.70	2.79	2.84	2.85	2.86	2.16
42. OTHER FAB. METAL PRODUCTS	0.96	0.99	1.04	1.07	1.09	1.12	2.97
43. ENGINES & TURBINES	0.50	0.51	0.53	0.54	0.54	0.54	1.77
45. CONSTR. & MINING MACHINERY	0.78	0.83	0.87	0.90	0.93	0.94	3.65
46. MATERIALS HANDLING MACH. & EQ.	0.28	0.29	0.31	0.32	0.33	0.34	3.63
47. METALWORKING MACH. & EQ.	0.65	0.67	0.71	0.74	0.76	0.78	3.75
49. GENERAL INDUSTRY MACHINERY	0.88	0.90	0.94	0.97	0.98	1.00	2.63
50. MISC. NONELECTRICAL MACH.	0.29	0.29	0.31	0.31	0.32	0.32	2.21
52. SERVICE INDUSTRY MACHINES	0.46	0.48	0.51	0.51	0.52	0.52	2.10
53. ELECTRICAL MACHINERY	0.92	0.93	0.98	1.00	1.01	1.02	2.22
55. ELECTRIC LIGHTING & WIRING EQ.	0.39	0.40	0.41	0.42	0.42	0.43	1.70
56. RADIO,TV, & COMMUNICATION EQ.	0.82	0.84	0.87	0.88	0.89	0.90	1.86
57. ELECTRONIC COMPONENTS & ACCESS.	0.37	0.38	0.40	0.42	0.43	0.44	3.64

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
81. MILLWRIGHTS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
58. MISC. ELECTRICAL MACH. & EQ.	0.77	0.80	0.83	0.84	0.85	0.86	2.12
59. MOTOR VEHICLES & EQUIPMENT	8.88	9.29	9.60	9.76	9.86	9.92	2.23
60. AIRCRAFT & PARTS	1.01	1.05	1.08	1.12	1.12	1.12	2.01
61. OTHER TRANSPORTATION EQ.	0.44	0.45	0.46	0.47	0.47	0.47	1.51
62. INSTRUMENTS & SUPPLIES	0.31	0.31	0.33	0.34	0.35	0.36	2.81
65. TRANSPORTATION & WAREHOUSING	0.44	0.46	0.47	0.49	0.51	0.52	3.43
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.64	0.66	0.68	0.70	0.70	0.71	1.92
82. GOVERNMENT INDUSTRY	0.44	0.44	0.44	0.45	0.46	0.47	1.15
TOTAL, ALL INDUSTRIES	81.30	83.78	86.07	87.87	88.90	89.42	1.92

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
82. TELEPHONE INSTALLERS&REPAIRERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
66. COMMUNICATION EXC. RADIO & TV	6.37	6.72	7.11	7.63	8.03	8.16	5.10
82. GOVERNMENT INDUSTRY	1.50	1.47	1.50	1.54	1.56	1.57	0.86
TOTAL, ALL INDUSTRIES	7.87	8.19	8.60	9.17	9.59	9.73	4.34
TOTAL EMPLOYMENT							
66. COMMUNICATION EXC. RADIO & TV	256.62	258.36	264.38	266.90	272.86	275.10	1.40
82. GOVERNMENT INDUSTRY	2.77	2.77	2.80	2.85	2.90	2.94	1.21
TOTAL, ALL INDUSTRIES	259.42	261.16	267.21	269.79	275.80	278.08	1.40

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
83. MECHANICS REPAIRERS INSTALL. NEC
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
2. OTHER AGRICULTURAL PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	2.79
4. AGR., FORESTRY, &FISHERY SERV.	0.01	0.01	0.01	0.01	0.01	0.01	6.86
5. IRON ORE MINING	0.10	0.11	0.12	0.13	0.14	0.14	7.88
6. NONFERROUS METAL MINING	0.10	0.12	0.13	0.14	0.16	0.17	10.74
7. COAL MINING	0.38	0.44	0.48	0.52	0.57	0.60	9.24
8. CRUDE PETROLEUM & N. GAS	0.03	0.03	0.03	0.03	0.04	0.04	4.63
9. STONE&CLAY MINING & QUARRYING	0.03	0.04	0.04	0.05	0.05	0.05	10.34
10. CHEM&FERTILIZER MIN. MINING	0.02	0.02	0.02	0.02	0.02	0.03	7.91
11. NEW CONSTRUCTION	3.43	3.90	4.21	4.68	5.05	5.32	9.17
13. ORDNANCE & ACCESSORIES	1.01	1.15	1.25	1.36	1.43	1.49	8.00
14. FOOD & KINDRED PRODUCTS	0.04	0.04	0.04	0.05	0.05	0.05	4.49
16. FABRIC, YARN & THREAD MILLS	0.34	0.36	0.38	0.39	0.41	0.42	4.08
17. MISC. TEXTILE GOODS	0.02	0.03	0.03	0.03	0.03	0.03	6.83
18. APPAREL	0.07	0.07	0.08	0.08	0.09	0.09	6.24
19. MISC. FABRICATED TEXTILE PROD.	0.04	0.04	0.05	0.05	0.05	0.05	4.69
20. LUMBER & WOOD PRODUCTS	0.02	0.02	0.02	0.02	0.03	0.03	8.77
24. PAPER & ALLIED PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	6.85
27. CHEMICALS & PRODUCTS	0.08	0.09	0.09	0.10	0.11	0.11	7.39
28. PLASTICS & SYNTHETIC MATLS.	0.02	0.02	0.02	0.02	0.03	0.03	8.71
31. PET REFINING & REL. PROD.	0.02	0.02	0.02	0.02	0.02	0.02	5.41
32. RUBBER & MISC. PLASTICS PROD.	0.01	0.02	0.02	0.02	0.02	0.02	10.43
35. GLASS & GLASS PRODUCTS	0.01	0.01	0.01	0.02	0.02	0.02	7.57
36. STONE & CLAY PRODUCTS	0.04	0.04	0.05	0.05	0.05	0.05	7.03
37. PRIMARY FERROUS METALS	0.12	0.13	0.14	0.15	0.16	0.17	7.32
38. NONFERROUS METALS	0.08	0.10	0.11	0.12	0.13	0.13	10.09
39. METAL CONTAINERS	0.01	0.01	0.01	0.01	0.01	0.01	6.62
40. FAB. STRUCTURAL METAL PRODUCTS	0.03	0.04	0.04	0.05	0.05	0.05	7.74
41. SCREW MACHINE PROD.&STAMPINGS	0.02	0.02	0.02	0.02	0.03	0.03	7.69
42. OTHER FAB. METAL PRODUCTS	0.02	0.02	0.03	0.03	0.03	0.03	9.62
43. ENGINES & TURBINES	0.07	0.08	0.09	0.09	0.10	0.10	7.72
45. CONSTR. & MINING MACHINERY	0.02	0.02	0.02	0.02	0.02	0.02	6.54
46. MATERIALS HANDLING MACH. & EQ.	0.03	0.03	0.03	0.03	0.04	0.04	8.40
49. GENERAL INDUSTRY MACHINERY	0.03	0.04	0.04	0.04	0.05	0.05	7.52
50. MISC. NONELECTRICAL MACH.	0.01	0.01	0.01	0.01	0.01	0.01	7.55
51. OFFICE, COMPUTING & ACCT. MACH.	0.04	0.04	0.04	0.05	0.05	0.05	7.33
52. SERVICE INDUSTRY MACHINES	0.01	0.02	0.02	0.02	0.02	0.03	13.38
53. ELECTRICAL MACHINERY	0.01	0.02	0.02	0.02	0.02	0.02	9.23

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
83. MECHANICS REPAIRERS INSTALL. NEC
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
55. ELECTRIC LIGHTING & WIRING EQ.	0.03	0.03	0.04	0.04	0.04	0.04	8.24
56. RADIO,TV, & COMMUNICATION EQ.	0.24	0.28	0.30	0.33	0.34	0.35	7.68
57. ELECTRONIC COMPONENTS & ACCESS.	0.10	0.12	0.14	0.15	0.17	0.17	11.36
59. MOTOR VEHICLES & EQUIPMENT	0.01	0.01	0.02	0.02	0.02	0.03	17.13
60. AIRCRAFT & PARTS	1.18	1.34	1.48	1.63	1.74	1.79	8.59
61. OTHER TRANSPORTATION EQ.	0.44	0.47	0.48	0.49	0.51	0.52	3.28
62. INSTRUMENTS & SUPPLIES	0.07	0.07	0.08	0.09	0.09	0.10	8.49
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.05	0.05	0.06	0.06	0.07	0.07	8.46
64. MISC. MANUFACTURING	0.01	0.01	0.01	0.01	0.01	0.01	8.91
65. TRANSPORTATION & WAREHOUSING	1.73	1.80	1.85	1.92	1.97	1.97	2.64
66. COMMUNICATION EXC. RADIO & TV	1.91	2.02	2.13	2.29	2.41	2.46	5.19
67. RADIO & TV BROADCASTING	0.01	0.01	0.01	0.01	0.01	0.01	8.22
68. UTILITIES	2.50	2.73	2.93	3.14	3.29	3.34	6.00
69. WHOLESALE & RETAIL TRADE	1.65	1.88	2.08	2.32	2.52	2.67	10.09
70. FINANCE & INSURANCE	0.01	0.01	0.01	0.01	0.01	0.01	9.69
71. REAL ESTATE & RENTAL	0.01	0.01	0.01	0.02	0.02	0.02	7.02
72. PERSONAL SERVICES EXC. AUTO.	1.45	1.65	1.81	1.99	2.14	2.26	9.26
73. BUSINESS SERVICES	0.42	0.46	0.50	0.54	0.58	0.59	7.39
74. EATING & DRINKING PLACES	0.01	0.02	0.02	0.02	0.02	0.02	9.80
75. AUTOMOBILE REPAIR & SERVICE	0.03	0.03	0.03	0.03	0.04	0.04	6.77
76. AMUSEMENTS	0.12	0.13	0.14	0.15	0.16	0.17	8.23
77. MISC. SERVICES	0.17	0.17	0.18	0.19	0.19	0.20	3.24
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	9.99	10.14	10.51	10.99	11.31	11.48	2.82
82. GOVERNMENT INDUSTRY	35.09	34.48	35.22	36.27	36.94	37.27	1.21
TOTAL, ALL INDUSTRIES	63.60	65.10	67.80	71.24	73.77	75.19	3.40
TOTAL EMPLOYMENT							
2. OTHER AGRICULTURAL PRODUCTS	5.15	5.17	5.19	5.18	5.17	5.16	0.05
4. AGR.,FORESTRY,&FISHERY SERV.	0.41	0.42	0.43	0.44	0.44	0.45	1.76
5. IRON ORE MINING	1.92	2.06	2.20	2.18	2.14	2.09	1.72
6. NONFERROUS METAL MINING	1.70	1.79	1.86	1.90	1.89	1.90	2.18
7. COAL MINING	13.70	14.43	14.99	15.39	15.92	16.29	3.53
8. CRUDE PETROLEUM & N. GAS	0.40	0.40	0.40	0.40	0.39	0.40	-0.17
9. STONE&CLAY MINING & QUARRYING	1.06	1.08	1.12	1.17	1.20	1.22	2.91
10. CHEM&FERTILIZER MIN. MINING	0.87	0.89	0.92	0.94	0.95	0.96	2.01
11. NEW CONSTRUCTION	91.36	93.76	96.14	99.67	102.54	104.43	2.71
13. ORDNANCE & ACCESSORIES	1.68	1.72	1.75	1.79	1.82	1.84	1.89
14. FOOD & KINDRED PRODUCTS	5.85	5.90	5.90	5.85	5.76	5.68	-0.60

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
83. MECHANICS REPAIRERS INSTALL. NEC
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
16. FABRIC,YARN & THREAD MILLS	27.37	27.91	28.37	28.64	28.61	28.37	0.71
17. MISC. TEXTILE GOODS	1.59	1.65	1.71	1.76	1.79	1.79	2.44
18. APPAREL	19.29	19.49	19.96	20.37	20.43	20.47	1.19
19. MISC. FABRICATED TEXTILE PROD.	1.43	1.46	1.50	1.53	1.55	1.57	1.87
20. LUMBER & WOOD PRODUCTS	0.86	0.92	0.96	0.99	1.00	0.99	2.97
24. PAPER & ALLIED PRODUCTS	0.48	0.49	0.50	0.50	0.50	0.50	1.01
27. CHEMICALS & PRODUCTS	1.63	1.66	1.68	1.70	1.70	1.71	0.89
28. PLASTICS & SYNTHETIC MATLS.	0.72	0.74	0.77	0.79	0.80	0.80	2.32
31. PET REFINING & REL. PROD.	0.33	0.33	0.34	0.34	0.34	0.34	0.46
32. RUBBER & MISC. PLASTICS PROD.	0.54	0.56	0.59	0.61	0.62	0.63	3.00
35. GLASS & GLASS PRODUCTS	0.53	0.53	0.53	0.53	0.52	0.50	-1.00
36. STONE & CLAY PRODUCTS	1.20	1.21	1.22	1.23	1.23	1.20	-0.12
37. PRIMARY FERROUS METALS	1.63	1.67	1.71	1.73	1.73	1.71	0.98
38. NONFERROUS METALS	0.98	1.03	1.08	1.12	1.14	1.17	3.46
39. METAL CONTAINERS	0.51	0.50	0.50	0.51	0.51	0.52	0.37
40. FAB. STRUCTURAL METAL PRODUCTS	0.78	0.78	0.80	0.83	0.85	0.86	1.99
41. SCREW MACHINE PROD.&STAMPINGS	0.30	0.32	0.33	0.33	0.33	0.34	2.17
42. OTHER FAB. METAL PRODUCTS	0.47	0.48	0.51	0.52	0.53	0.54	2.92
43. ENGINES & TURBINES	0.83	0.85	0.88	0.89	0.90	0.90	1.78
45. CONSTR. & MINING MACHINERY	1.27	1.33	1.39	1.43	1.46	1.47	2.96
46. MATERIALS HANDLING MACH. & EQ.	0.45	0.47	0.49	0.51	0.52	0.52	2.94
49. GENERAL INDUSTRY MACHINERY	0.75	0.76	0.80	0.82	0.84	0.85	2.62
50. MISC. NONELECTRICAL MACH.	0.08	0.09	0.09	0.09	0.09	0.09	2.24
51. OFFICE,COMPUTING & ACCT. MACH.	0.95	0.98	1.03	1.04	1.06	1.08	2.73
52. SERVICE INDUSTRY MACHINES	0.79	0.82	0.86	0.87	0.87	0.87	2.11
53. ELECTRICAL MACHINERY	0.27	0.28	0.29	0.29	0.30	0.30	2.17
55. ELECTRIC LIGHTING & WIRING EQ.	0.63	0.63	0.65	0.67	0.68	0.68	1.69
56. RADIO,TV, & COMMUNICATION EQ.	0.57	0.58	0.60	0.61	0.61	0.62	1.55
57. ELECTRONIC COMPONENTS & ACCESS.	0.47	0.49	0.51	0.53	0.54	0.56	3.64
59. MOTOR VEHICLES & EQUIPMENT	0.64	0.67	0.69	0.70	0.71	0.72	2.22
60. AIRCRAFT & PARTS	2.37	2.47	2.53	2.61	2.62	2.62	2.00
61. OTHER TRANSPORTATION EQ.	1.53	1.58	1.63	1.67	1.67	1.68	1.86
62. INSTRUMENTS & SUPPLIES	0.56	0.57	0.60	0.62	0.64	0.65	3.02
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	1.06	1.08	1.12	1.17	1.21	1.24	3.10
64. MISC. MANUFACTURING	0.77	0.80	0.85	0.90	0.94	0.97	4.76
65. TRANSPORTATION & WAREHOUSING	40.65	40.89	41.03	41.33	40.88	40.18	-0.23
66. COMMUNICATION EXC. RADIO & TV	76.94	77.53	79.40	80.23	82.09	82.83	1.49
67. RADIO & TV BROADCASTING	0.33	0.34	0.35	0.36	0.36	0.36	1.78
68. UTILITIES	116.04	116.18	116.24	116.26	116.39	116.34	0.05

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
83. MECHANICS REPAIRERS INSTALL. NEC
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
69. WHOLESALE & RETAIL TRADE	269.47	279.45	289.47	298.18	305.30	312.66	3.02
70. FINANCE & INSURANCE	0.70	0.71	0.73	0.75	0.77	0.79	2.59
71. REAL ESTATE & RENTAL	0.44	0.45	0.45	0.46	0.46	0.46	0.72
72. PERSONAL SERVICES EXC. AUTO.	79.33	81.28	83.61	85.96	88.32	90.49	2.67
73. BUSINESS SERVICES	8.57	8.73	8.92	9.16	9.35	9.48	2.06
74. EATING & DRINKING PLACES	0.93	0.94	0.96	0.97	0.98	0.98	1.11
75. AUTOMOBILE REPAIR & SERVICE	1.81	1.83	1.84	1.84	1.84	1.85	0.49
76. AMUSEMENTS	11.88	12.02	12.33	12.60	12.89	13.15	2.06
77. MISC. SERVICES	25.89	26.01	26.21	26.59	27.07	27.62	1.30
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	141.52	144.25	147.44	150.48	153.10	155.25	1.87
82. GOVERNMENT INDUSTRY	115.06	114.81	115.90	117.86	119.83	121.64	1.12
TOTAL, ALL INDUSTRIES	1,097.24	1,118.36	1,143.08	1,166.68	1,187.04	1,203.68	1.87

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
84. METALWORKING CRAFTS WORKERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
5. IRON ORE MINING	0.02	0.02	0.02	0.02	0.02	0.02	7.73
6. NONFERROUS METAL MINING	0.09	0.11	0.12	0.13	0.14	0.15	11.39
7. COAL MINING	0.02	0.03	0.03	0.03	0.03	0.03	9.08
8. CRUDE PETROLEUM & N. GAS	0.06	0.06	0.07	0.07	0.08	0.08	4.97
9. STONE&CLAY MINING & QUARRYING	0.01	0.01	0.01	0.01	0.01	0.01	9.55
11. NEW CONSTRUCTION	3.88	4.36	4.67	5.13	5.49	5.73	8.11
13. ORDNANCE & ACCESSORIES	4.33	4.89	5.33	5.75	6.06	6.28	7.72
14. FOOD & KINDRED PRODUCTS	0.05	0.05	0.05	0.05	0.06	0.06	5.08
16. FABRIC,YARN & THREAD MILLS	0.03	0.03	0.04	0.04	0.04	0.04	4.92
17. MISC. TEXTILE GOODS	0.01	0.01	0.01	0.01	0.01	0.01	7.11
19. MISC. FABRICATED TEXTILE PROD.	0.02	0.02	0.02	0.02	0.02	0.03	4.68
20. LUMBER & WOOD PRODUCTS	0.03	0.04	0.04	0.05	0.05	0.05	9.87
21. WOOD CONTAINERS	0.01	0.01	0.01	0.01	0.01	0.01	9.81
22. HOUSEHOLD FURNITURE	0.01	0.01	0.01	0.01	0.01	0.01	3.71
23. OTHER FURNITURE & FIXTURES	0.06	0.07	0.07	0.07	0.08	0.08	4.53
24. PAPER & ALLIED PRODUCTS	0.10	0.11	0.12	0.13	0.14	0.14	6.71
25. PAPERBOARD CONTAINERS & BOXES	0.05	0.06	0.07	0.07	0.08	0.08	8.77
26. PRINTING & PUBLISHING	0.05	0.05	0.06	0.06	0.06	0.06	5.85
27. CHEMICALS & PRODUCTS	0.21	0.23	0.25	0.27	0.29	0.31	7.92
28. PLASTICS & SYNTHETIC MATLS.	0.07	0.08	0.08	0.09	0.10	0.10	8.70
29. DRUGS,CLEANING & TOILET PREP.	0.01	0.01	0.01	0.01	0.01	0.02	4.19
30. PAINTS & ALLIED PRODUCTS	0.02	0.02	0.02	0.02	0.03	0.03	8.21
31. PET REFINING & REL. PROD.	0.19	0.20	0.21	0.23	0.24	0.25	5.24
32. RUBBER & MISC. PLASTICS PROD.	0.40	0.44	0.49	0.55	0.59	0.62	9.52
35. GLASS & GLASS PRODUCTS	0.09	0.10	0.11	0.12	0.12	0.13	8.41
36. STONE & CLAY PRODUCTS	0.13	0.14	0.15	0.17	0.18	0.18	7.65
37. PRIMARY FERROUS METALS	3.11	3.43	3.68	3.98	4.20	4.35	6.91
38. NONFERROUS METALS	2.30	2.63	2.88	3.16	3.40	3.55	9.09
39. METAL CONTAINERS	0.07	0.07	0.08	0.08	0.09	0.09	6.60
40. FAB. STRUCTURAL METAL PRODUCTS	2.17	2.43	2.59	2.77	2.92	3.07	7.13
41. SCREW MACHINE PROD.&STAMPINGS	2.30	2.55	2.73	2.96	3.13	3.24	7.12
42. OTHER FAB. METAL PRODUCTS	0.79	0.90	0.99	1.10	1.19	1.26	9.71
43. ENGINES & TURBINES	0.43	0.49	0.54	0.57	0.60	0.63	7.85
44. FARM & GARDEN MACHINERY	0.01	0.02	0.02	0.02	0.02	0.02	8.21
45. CONSTR. & MINING MACHINERY	0.16	0.17	0.19	0.20	0.21	0.22	7.08
46. MATERIALS HANDLING MACH. & EQ.	0.27	0.31	0.33	0.37	0.39	0.41	8.96
47. METALWORKING MACH. & EQ.	3.19	3.66	4.02	4.44	4.76	4.96	9.22

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
84. METALWORKING CRAFTS WORKERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
48. SPECIAL INDUSTRY MACHINERY	0.10	0.11	0.12	0.14	0.16	0.17	12.06
49. GENERAL INDUSTRY MACHINERY	0.94	1.05	1.13	1.21	1.29	1.34	7.37
50. MISC. NONELECTRICAL MACH.	3.00	3.28	3.61	3.97	4.23	4.37	7.80
51. OFFICE,COMPUTING & ACCT. MACH.	0.22	0.26	0.28	0.29	0.30	0.31	6.71
52. SERVICE INDUSTRY MACHINES	0.17	0.20	0.22	0.25	0.29	0.32	13.37
53. ELECTRICAL MACHINERY	0.61	0.70	0.76	0.83	0.89	0.93	8.75
54. HOUSEHOLD APPLIANCES	0.01	0.01	0.01	0.02	0.02	0.02	9.50
55. ELECTRIC LIGHTING & WIRING EQ.	0.40	0.45	0.48	0.52	0.55	0.57	7.36
56. RADIO,TV, & COMMUNICATION EQ.	5.11	5.80	6.30	6.76	7.03	7.11	6.84
57. ELECTRONIC COMPONENTS & ACCESS.	2.03	2.41	2.71	3.02	3.28	3.43	11.04
58. MISC. ELECTRICAL MACH. & EQ.	0.13	0.15	0.17	0.19	0.20	0.21	9.57
59. MOTOR VEHICLES & EQUIPMENT	0.75	0.90	1.02	1.21	1.41	1.65	17.13
60. AIRCRAFT & PARTS	13.08	14.79	16.29	17.97	19.22	19.72	8.56
61. OTHER TRANSPORTATION EQ.	4.34	4.57	4.72	4.82	4.97	5.13	3.41
62. INSTRUMENTS & SUPPLIES	1.66	1.87	2.03	2.22	2.37	2.45	8.12
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.20	0.22	0.24	0.27	0.29	0.31	8.58
64. MISC. MANUFACTURING	0.10	0.11	0.11	0.12	0.12	0.13	5.17
65. TRANSPORTATION & WAREHOUSING	0.73	0.76	0.78	0.81	0.83	0.83	2.58
68. UTILITIES	0.13	0.14	0.15	0.16	0.16	0.17	6.00
69. WHOLESALE & RETAIL TRADE	0.11	0.12	0.13	0.15	0.16	0.17	9.52
72. PERSONAL SERVICES EXC. AUTO.	0.38	0.45	0.50	0.57	0.63	0.68	12.29
73. BUSINESS SERVICES	0.18	0.20	0.22	0.24	0.25	0.26	7.86
75. AUTOMOBILE REPAIR & SERVICE	0.08	0.08	0.09	0.10	0.10	0.10	6.79
77. MISC. SERVICES	0.06	0.06	0.06	0.06	0.06	0.07	3.43
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	2.56	2.69	2.83	2.98	3.07	3.11	3.97
82. GOVERNMENT INDUSTRY	28.49	27.91	28.39	29.11	29.52	29.66	0.81
TOTAL, ALL INDUSTRIES	90.32	97.13	103.46	110.78	116.33	119.57	5.77
TOTAL EMPLOYMENT							
5. IRON ORE MINING	0.33	0.36	0.38	0.38	0.37	0.36	1.58
6. NONFERROUS METAL MINING	1.54	1.64	1.71	1.76	1.75	1.77	2.78
7. COAL MINING	0.80	0.84	0.87	0.89	0.92	0.94	3.38
8. CRUDE PETROLEUM & N. GAS	0.82	0.82	0.83	0.82	0.81	0.82	0.15
9. STONE&CLAY MINING & QUARRYING	0.28	0.28	0.29	0.30	0.31	0.31	2.18
11. NEW CONSTRUCTION	103.31	104.91	106.48	109.32	111.44	112.48	1.72
13. ORDNANCE & ACCESSORIES	7.17	7.32	7.44	7.60	7.69	7.77	1.62
14. FOOD & KINDRED PRODUCTS	6.80	6.89	6.93	6.91	6.84	6.78	-0.04
16. FABRIC,YARN & THREAD MILLS	2.51	2.58	2.65	2.70	2.71	2.71	1.53

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
84. METALWORKING CRAFTS WORKERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
17. MISC. TEXTILE GOODS	0.71	0.74	0.77	0.80	0.81	0.81	2.72
19. MISC. FABRICATED TEXTILE PROD.	0.69	0.71	0.73	0.74	0.75	0.76	1.86
20. LUMBER & WOOD PRODUCTS	1.60	1.75	1.83	1.92	1.95	1.95	4.01
21. WOOD CONTAINERS	0.09	0.09	0.09	0.10	0.10	0.10	1.15
22. HOUSEHOLD FURNITURE	1.53	1.61	1.66	1.72	1.76	1.77	3.04
23. OTHER FURNITURE & FIXTURES	3.98	4.00	4.12	4.24	4.33	4.42	2.12
24. PAPER & ALLIED PRODUCTS	5.42	5.58	5.64	5.66	5.66	5.66	0.87
25. PAPERBOARD CONTAINERS & BOXES	2.42	2.48	2.54	2.59	2.62	2.63	1.71
26. PRINTING & PUBLISHING	3.06	3.07	3.08	3.10	3.10	3.10	0.25
27. CHEMICALS & PRODUCTS	4.34	4.43	4.51	4.57	4.61	4.65	1.39
28. PLASTICS & SYNTHETIC MATLS.	2.79	2.89	3.00	3.07	3.12	3.13	2.31
29. DRUGS,CLEANING & TOILET PREP.	3.50	3.53	3.58	3.63	3.63	3.64	0.78
30. PAINTS & ALLIED PRODUCTS	0.34	0.35	0.37	0.38	0.39	0.39	2.98
31. PET REFINING & REL. PROD.	3.55	3.54	3.56	3.60	3.60	3.60	0.30
32. RUBBER & MISC. PLASTICS PROD.	14.54	14.92	15.43	15.82	16.11	16.17	2.15
35. GLASS & GLASS PRODUCTS	3.95	3.99	4.02	4.02	3.98	3.91	-0.22
36. STONE & CLAY PRODUCTS	3.94	4.00	4.04	4.12	4.11	4.04	0.46
37. PRIMARY FERROUS METALS	43.69	44.61	45.60	45.77	45.56	45.00	0.59
38. NONFERROUS METALS	27.14	28.08	29.15	29.94	30.35	30.72	2.51
39. METAL CONTAINERS	4.60	4.53	4.54	4.62	4.66	4.68	0.35
40. FAB. STRUCTURAL METAL PRODUCTS	48.71	48.58	49.53	50.95	51.80	52.26	1.42
41. SCREW MACHINE PROD.&STAMPINGS	37.43	39.10	40.14	40.60	40.60	40.56	1.62
42. OTHER FAB. METAL PRODUCTS	17.19	17.73	18.50	19.08	19.50	19.94	3.01
43. ENGINES & TURBINES	5.19	5.36	5.57	5.63	5.67	5.70	1.90
44. FARM & GARDEN MACHINERY	4.56	4.69	4.94	5.01	5.07	5.13	2.37
45. CONSTR. & MINING MACHINERY	13.13	13.86	14.56	15.06	15.44	15.59	3.49
46. MATERIALS HANDLING MACH. & EQ.	4.69	4.84	5.12	5.32	5.46	5.57	3.47
47. METALWORKING MACH. & EQ.	62.04	64.47	68.22	70.90	72.86	74.15	3.63
48. SPECIAL INDUSTRY MACHINERY	13.38	13.66	14.34	14.98	15.35	15.67	3.22
49. GENERAL INDUSTRY MACHINERY	21.37	21.87	22.87	23.45	23.81	24.16	2.49
50. MISC. NONELECTRICAL MACH.	26.22	26.98	28.19	28.89	29.23	29.63	2.47
51. OFFICE,COMPUTING & ACCT. MACH.	5.96	6.15	6.37	6.45	6.51	6.62	2.14
52. SERVICE INDUSTRY MACHINES	9.50	9.87	10.34	10.51	10.54	10.54	2.11
53. ELECTRICAL MACHINERY	12.31	12.48	13.00	13.25	13.35	13.41	1.72
54. HOUSEHOLD APPLIANCES	4.47	4.59	4.71	4.87	4.98	5.05	2.47
55. ELECTRIC LIGHTING & WIRING EQ.	8.42	8.39	8.55	8.68	8.74	8.79	0.87
56. RADIO,TV, & COMMUNICATION EQ.	12.09	12.22	12.46	12.53	12.50	12.56	0.77
57. ELECTRONIC COMPONENTS & ACCESS.	9.27	9.64	10.09	10.47	10.74	10.93	3.34
58. MISC. ELECTRICAL MACH. & EQ.	4.95	5.12	5.32	5.39	5.45	5.50	2.12

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
84. METALWORKING CRAFTS WORKERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
59. MOTOR VEHICLES & EQUIPMENT	38.78	40.54	41.91	42.58	43.05	43.29	2.22
60. AIRCRAFT & PARTS	26.20	27.24	27.97	28.84	28.91	28.88	1.97
61. OTHER TRANSPORTATION EQ.	14.96	15.41	15.97	16.32	16.37	16.52	2.00
62. INSTRUMENTS & SUPPLIES	14.24	14.47	15.03	15.60	15.99	16.24	2.66
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	4.68	4.74	4.95	5.17	5.34	5.48	3.21
64. MISC. MANUFACTURING	8.84	8.90	9.12	9.30	9.37	9.37	1.16
65. TRANSPORTATION & WAREHOUSING	17.22	17.31	17.36	17.47	17.27	16.97	-0.29
68. UTILITIES	5.82	5.82	5.83	5.83	5.83	5.83	0.05
69. WHOLESALE & RETAIL TRADE	17.38	17.92	18.47	18.92	19.28	19.65	2.48
72. PERSONAL SERVICES EXC. AUTO.	20.85	22.06	23.37	24.69	26.01	27.28	5.52
73. BUSINESS SERVICES	3.70	3.79	3.89	4.02	4.12	4.19	2.51
75. AUTOMOBILE REPAIR & SERVICE	5.18	5.26	5.28	5.28	5.29	5.32	0.51
77. MISC. SERVICES	8.57	8.63	8.71	8.86	9.03	9.23	1.49
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	22.08	22.60	23.26	23.81	24.15	24.37	1.99
82. GOVERNMENT INDUSTRY	65.96	65.85	66.52	67.77	69.00	69.97	1.19
TOTAL, ALL INDUSTRIES	854.62	874.57	900.22	921.47	934.56	943.32	1.99

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83 .

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
85. BLACKSMITHS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
37. PRIMARY FERROUS METALS	0.02	0.03	0.03	0.03	0.03	0.04	7.41
38. NONFERROUS METALS	0.01	0.01	0.01	0.01	0.01	0.01	10.26
40. FAB. STRUCTURAL METAL PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	7.39
41. SCREW MACHINE PROD.&STAMPINGS	0.01	0.02	0.02	0.02	0.02	0.02	7.67
47. METALWORKING MACH. & EQ.	0.01	0.01	0.01	0.01	0.01	0.01	9.34
65. TRANSPORTATION & WAREHOUSING	0.03	0.03	0.03	0.03	0.03	0.03	2.23
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.43	0.44	0.45	0.47	0.49	0.49	2.80
82. GOVERNMENT INDUSTRY	0.16	0.16	0.16	0.17	0.17	0.17	0.84
TOTAL, ALL INDUSTRIES	0.69	0.71	0.74	0.77	0.79	0.80	2.96
TOTAL EMPLOYMENT							
37. PRIMARY FERROUS METALS	0.34	0.35	0.36	0.37	0.37	0.36	1.06
38. NONFERROUS METALS	0.09	0.10	0.10	0.11	0.11	0.11	3.61
40. FAB. STRUCTURAL METAL PRODUCTS	0.13	0.13	0.13	0.14	0.14	0.14	1.67
41. SCREW MACHINE PROD.&STAMPINGS	0.24	0.25	0.26	0.27	0.27	0.27	2.14
47. METALWORKING MACH. & EQ.	0.14	0.14	0.15	0.15	0.16	0.16	3.74
65. TRANSPORTATION & WAREHOUSING	0.66	0.67	0.67	0.67	0.66	0.64	-0.63
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	3.23	3.29	3.37	3.44	3.46	3.47	1.45
82. GOVERNMENT INDUSTRY	0.37	0.37	0.37	0.38	0.39	0.39	1.27
TOTAL, ALL INDUSTRIES	5.62	5.73	5.87	5.98	6.03	6.04	1.45

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
86. BOILERMAKERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
6. NONFERROUS METAL MINING	0.01	0.01	0.01	0.02	0.02	0.02	10.63
11. NEW CONSTRUCTION	0.56	0.62	0.66	0.72	0.76	0.78	6.71
13. ORDNANCE & ACCESSORIES	0.02	0.02	0.02	0.02	0.02	0.02	6.90
24. PAPER & ALLIED PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	6.54
27. CHEMICALS & PRODUCTS	0.03	0.04	0.04	0.04	0.05	0.05	8.06
31. PET REFINING & REL. PROD.	0.06	0.06	0.07	0.07	0.08	0.08	5.24
37. PRIMARY FERROUS METALS	0.12	0.13	0.14	0.15	0.16	0.16	6.91
38. NONFERROUS METALS	0.02	0.03	0.03	0.04	0.04	0.04	10.64
40. FAB. STRUCTURAL METAL PRODUCTS	0.10	0.11	0.12	0.13	0.13	0.14	6.98
42. OTHER FAB. METAL PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	10.10
49. GENERAL INDUSTRY MACHINERY	0.01	0.02	0.02	0.02	0.02	0.02	7.54
56. RADIO,TV, & COMMUNICATION EQ.	0.01	0.01	0.01	0.01	0.01	0.01	8.53
61. OTHER TRANSPORTATION EQ.	0.65	0.69	0.71	0.72	0.74	0.77	3.33
65. TRANSPORTATION & WAREHOUSING	0.05	0.05	0.05	0.05	0.05	0.05	2.14
68. UTILITIES	0.05	0.05	0.06	0.06	0.07	0.07	5.87
72. PERSONAL SERVICES EXC. AUTO.	0.08	0.09	0.11	0.12	0.13	0.14	12.47
77. MISC. SERVICES	0.01	0.01	0.01	0.01	0.01	0.01	4.44
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.05	0.05	0.05	0.05	0.05	0.06	2.88
82. GOVERNMENT INDUSTRY	1.41	1.38	1.41	1.45	1.47	1.48	1.00
TOTAL, ALL INDUSTRIES	3.29	3.43	3.57	3.74	3.88	3.97	3.84
TOTAL EMPLOYMENT							
6. NONFERROUS METAL MINING	0.20	0.21	0.22	0.22	0.22	0.22	2.08
11. NEW CONSTRUCTION	14.99	15.02	15.04	15.24	15.34	15.29	0.40
13. ORDNANCE & ACCESSORIES	0.03	0.03	0.03	0.03	0.03	0.03	0.85
24. PAPER & ALLIED PRODUCTS	0.48	0.50	0.50	0.50	0.50	0.50	0.72
27. CHEMICALS & PRODUCTS	0.67	0.69	0.70	0.71	0.72	0.72	1.52
31. PET REFINING & REL. PROD.	1.13	1.13	1.14	1.15	1.15	1.15	0.31
37. PRIMARY FERROUS METALS	1.65	1.69	1.73	1.73	1.72	1.70	0.59
38. NONFERROUS METALS	0.30	0.31	0.33	0.34	0.35	0.36	3.97
40. FAB. STRUCTURAL METAL PRODUCTS	2.21	2.20	2.24	2.30	2.34	2.36	1.28
42. OTHER FAB. METAL PRODUCTS	0.13	0.14	0.14	0.15	0.15	0.16	3.38
49. GENERAL INDUSTRY MACHINERY	0.31	0.31	0.33	0.34	0.34	0.35	2.65
56. RADIO,TV, & COMMUNICATION EQ.	0.01	0.01	0.01	0.01	0.01	0.01	2.36
61. OTHER TRANSPORTATION EQ.	2.24	2.31	2.39	2.44	2.45	2.47	1.92
65. TRANSPORTATION & WAREHOUSING	1.14	1.15	1.14	1.15	1.13	1.10	-0.72

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
86. BOILERMAKERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
68. UTILITIES	2.33	2.33	2.32	2.32	2.32	2.32	-0.07
72. PERSONAL SERVICES EXC. AUTO.	4.35	4.62	4.90	5.18	5.47	5.74	5.69
77. MISC. SERVICES	1.81	1.84	1.88	1.93	1.98	2.04	2.47
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.55	0.56	0.57	0.58	0.59	0.59	1.46
82. GOVERNMENT INDUSTRY	6.01	6.00	6.07	6.19	6.31	6.41	1.29
TOTAL, ALL INDUSTRIES	42.08	42.61	43.31	44.19	44.82	45.24	1.46

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
87. COREMAKERS, HAND, BENCH, FLOOR
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	0.02	0.02	0.02	0.02	0.02	0.02	6.44
37. PRIMARY FERROUS METALS	0.26	0.29	0.30	0.33	0.34	0.35	6.09
38. NONFERROUS METALS	0.12	0.14	0.15	0.16	0.17	0.18	8.69
40. FAB. STRUCTURAL METAL PRODUCTS	0.01	0.01	0.01	0.01	0.02	0.02	8.98
42. OTHER FAB. METAL PRODUCTS	0.01	0.01	0.01	0.02	0.02	0.02	10.15
43. ENGINES & TURBINES	0.01	0.01	0.01	0.01	0.01	0.01	7.65
47. METALWORKING MACH. & EQ.	0.01	0.01	0.01	0.01	0.01	0.01	9.38
49. GENERAL INDUSTRY MACHINERY	0.02	0.02	0.02	0.02	0.02	0.03	7.50
55. ELECTRIC LIGHTING & WIRING EQ.	0.01	0.01	0.01	0.01	0.01	0.01	8.27
56. RADIO,TV, & COMMUNICATION EQ.	0.02	0.02	0.02	0.03	0.03	0.03	8.35
60. AIRCRAFT & PARTS	0.03	0.04	0.04	0.05	0.05	0.05	8.63
61. OTHER TRANSPORTATION EQ.	0.02	0.02	0.02	0.02	0.02	0.02	2.67
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.01	0.01	0.01	0.01	0.01	0.01	5.37
82. GOVERNMENT INDUSTRY	0.00	0.00	0.00	0.00	0.00	0.00	--
TOTAL, ALL INDUSTRIES	0.57	0.64	0.69	0.74	0.79	0.81	7.24
TOTAL EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	0.03	0.03	0.03	0.03	0.03	0.03	0.42
37. PRIMARY FERROUS METALS	3.68	3.72	3.78	3.76	3.72	3.64	-0.18
38. NONFERROUS METALS	1.42	1.46	1.51	1.54	1.56	1.57	2.14
40. FAB. STRUCTURAL METAL PRODUCTS	0.24	0.24	0.25	0.26	0.27	0.28	3.17
42. OTHER FAB. METAL PRODUCTS	0.24	0.24	0.26	0.26	0.27	0.28	3.43
43. ENGINES & TURBINES	0.12	0.13	0.13	0.13	0.13	0.13	1.71
47. METALWORKING MACH. & EQ.	0.16	0.17	0.18	0.18	0.19	0.19	3.78
49. GENERAL INDUSTRY MACHINERY	0.41	0.42	0.44	0.45	0.46	0.47	2.60
55. ELECTRIC LIGHTING & WIRING EQ.	0.13	0.14	0.14	0.14	0.15	0.15	1.72
56. RADIO,TV, & COMMUNICATION EQ.	0.04	0.05	0.05	0.05	0.05	0.05	2.18
60. AIRCRAFT & PARTS	0.07	0.07	0.07	0.07	0.07	0.07	2.03
61. OTHER TRANSPORTATION EQ.	0.06	0.06	0.06	0.06	0.06	0.06	1.27
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.14	0.15	0.15	0.15	0.15	0.15	1.21
82. GOVERNMENT INDUSTRY	0.01	0.01	0.01	0.01	0.01	0.01	0.83
TOTAL, ALL INDUSTRIES	7.65	7.82	8.03	8.13	8.15	8.13	1.21

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
88. FORGING PRESS OPERATORS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	0.02	0.03	0.03	0.03	0.03	0.03	8.81
37. PRIMARY FERROUS METALS	0.02	0.02	0.02	0.02	0.03	0.03	7.19
38. NONFERROUS METALS	0.03	0.03	0.03	0.04	0.04	0.04	9.68
40. FAB. STRUCTURAL METAL PRODUCTS	0.04	0.04	0.05	0.05	0.05	0.06	8.26
41. SCREW MACHINE PROD.&STAMPINGS	0.14	0.15	0.16	0.18	0.19	0.20	7.69
42. OTHER FAB. METAL PRODUCTS	0.02	0.03	0.03	0.03	0.03	0.04	10.02
46. MATERIALS HANDLING MACH. & EQ.	0.01	0.01	0.01	0.01	0.01	0.01	9.12
47. METALWORKING MACH. & EQ.	0.01	0.01	0.01	0.01	0.01	0.01	9.36
53. ELECTRICAL MACHINERY	0.01	0.01	0.01	0.02	0.02	0.02	9.31
56. RADIO,TV, & COMMUNICATION EQ.	0.01	0.01	0.01	0.01	0.01	0.01	8.00
59. MOTOR VEHICLES & EQUIPMENT	0.01	0.02	0.02	0.02	0.03	0.03	17.14
60. AIRCRAFT & PARTS	0.52	0.58	0.64	0.71	0.76	0.78	8.59
61. OTHER TRANSPORTATION EQ.	0.05	0.05	0.05	0.05	0.05	0.05	2.66
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.02	0.02	0.02	0.02	0.02	0.02	5.25
82. GOVERNMENT INDUSTRY	0.01	0.01	0.01	0.01	0.01	0.01	-0.33
TOTAL, ALL INDUSTRIES	0.93	1.04	1.14	1.25	1.33	1.38	8.21
TOTAL EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	0.04	0.04	0.04	0.04	0.04	0.04	2.65
37. PRIMARY FERROUS METALS	0.27	0.27	0.28	0.28	0.28	0.28	0.86
38. NONFERROUS METALS	0.30	0.31	0.33	0.34	0.34	0.35	3.06
40. FAB. STRUCTURAL METAL PRODUCTS	0.85	0.86	0.89	0.92	0.95	0.97	2.49
41. SCREW MACHINE PROD.&STAMPINGS	2.23	2.35	2.42	2.46	2.48	2.48	2.16
42. OTHER FAB. METAL PRODUCTS	0.49	0.51	0.54	0.55	0.57	0.58	3.30
46. MATERIALS HANDLING MACH. & EQ.	0.12	0.12	0.13	0.13	0.13	0.14	3.62
47. METALWORKING MACH. & EQ.	0.12	0.12	0.13	0.14	0.14	0.14	3.76
53. ELECTRICAL MACHINERY	0.22	0.23	0.24	0.25	0.25	0.25	2.24
56. RADIO,TV, & COMMUNICATION EQ.	0.02	0.02	0.02	0.02	0.02	0.02	1.86
59. MOTOR VEHICLES & EQUIPMENT	0.76	0.79	0.82	0.83	0.84	0.85	2.23
60. AIRCRAFT & PARTS	1.03	1.07	1.10	1.14	1.14	1.14	1.99
61. OTHER TRANSPORTATION EQ.	0.17	0.17	0.17	0.18	0.18	0.18	1.26
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.14	0.14	0.15	0.15	0.15	0.15	2.32
82. GOVERNMENT INDUSTRY	0.00	0.00	0.00	0.00	0.00	0.00	--
TOTAL, ALL INDUSTRIES	7.75	8.04	8.32	8.52	8.62	8.69	2.32

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE

BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
89. HEADER OPERATORS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
40. FAB. STRUCTURAL METAL PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	8.23
41. SCREW MACHINE PROD.&STAMPINGS	0.26	0.30	0.32	0.35	0.37	0.38	7.77
TOTAL, ALL INDUSTRIES	0.28	0.32	0.34	0.37	0.39	0.41	7.79
TOTAL EMPLOYMENT							
40. FAB. STRUCTURAL METAL PRODUCTS	0.20	0.20	0.21	0.21	0.22	0.22	2.46
41. SCREW MACHINE PROD.&STAMPINGS	4.31	4.53	4.68	4.76	4.79	4.81	2.24
TOTAL, ALL INDUSTRIES	4.60	4.83	4.99	5.08	5.12	5.15	2.26

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
90. HEAT TREATERS,ANNEALERS,TEMPERERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	0.14	0.16	0.17	0.18	0.19	0.20	7.80
37. PRIMARY FERROUS METALS	0.22	0.24	0.26	0.28	0.30	0.32	7.58
38. NONFERROUS METALS	0.36	0.40	0.44	0.48	0.51	0.53	8.35
40. FAB. STRUCTURAL METAL PRODUCTS	0.05	0.06	0.06	0.07	0.07	0.08	8.45
41. SCREW MACHINE PROD.&STAMPINGS	0.09	0.10	0.11	0.12	0.13	0.13	7.73
42. OTHER FAB. METAL PRODUCTS	0.05	0.05	0.06	0.06	0.07	0.07	10.07
43. ENGINES & TURBINES	0.02	0.02	0.02	0.02	0.02	0.02	7.73
45. CONSTR. & MINING MACHINERY	0.01	0.01	0.01	0.01	0.01	0.01	7.25
46. MATERIALS HANDLING MACH. & EQ.	0.01	0.01	0.01	0.02	0.02	0.02	9.12
47. METALWORKING MACH. & EQ.	0.07	0.08	0.09	0.09	0.10	0.11	9.36
49. GENERAL INDUSTRY MACHINERY	0.06	0.07	0.08	0.08	0.09	0.09	7.51
50. MISC. NONELECTRICAL MACH.	0.04	0.04	0.05	0.05	0.06	0.06	7.52
53. ELECTRICAL MACHINERY	0.02	0.03	0.03	0.03	0.04	0.04	9.14
55. ELECTRIC LIGHTING & WIRING EQ.	0.01	0.01	0.01	0.01	0.01	0.01	8.28
56. RADIO,TV, & COMMUNICATION EQ.	0.10	0.11	0.12	0.13	0.14	0.14	7.89
57. ELECTRONIC COMPONENTS & ACCESS.	0.09	0.11	0.12	0.14	0.15	0.16	11.37
59. MOTOR VEHICLES & EQUIPMENT	0.05	0.06	0.06	0.08	0.09	0.10	17.14
60. AIRCRAFT & PARTS	0.61	0.69	0.76	0.84	0.90	0.92	8.59
61. OTHER TRANSPORTATION EQ.	0.06	0.07	0.07	0.07	0.07	0.07	3.20
62. INSTRUMENTS & SUPPLIES	0.05	0.06	0.06	0.07	0.07	0.07	8.18
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.01	0.01	0.01	0.01	0.01	0.01	5.48
82. GOVERNMENT INDUSTRY	0.15	0.15	0.15	0.15	0.16	0.16	0.88
TOTAL, ALL INDUSTRIES	2.27	2.54	2.77	3.02	3.22	3.34	8.07
TOTAL EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	0.23	0.23	0.24	0.24	0.25	0.25	1.70
37. PRIMARY FERROUS METALS	3.07	3.16	3.25	3.28	3.28	3.26	1.23
38. NONFERROUS METALS	4.21	4.33	4.46	4.55	4.58	4.61	1.82
40. FAB. STRUCTURAL METAL PRODUCTS	1.15	1.16	1.20	1.24	1.28	1.31	2.67
41. SCREW MACHINE PROD.&STAMPINGS	1.50	1.58	1.63	1.66	1.67	1.67	2.20
42. OTHER FAB. METAL PRODUCTS	0.98	1.01	1.06	1.10	1.13	1.15	3.35
43. ENGINES & TURBINES	0.19	0.20	0.21	0.21	0.21	0.21	1.79
45. CONSTR. & MINING MACHINERY	0.57	0.60	0.64	0.66	0.68	0.68	3.65
46. MATERIALS HANDLING MACH. & EQ.	0.20	0.21	0.22	0.23	0.24	0.24	3.63
47. METALWORKING MACH. & EQ.	1.32	1.37	1.45	1.51	1.56	1.59	3.76
49. GENERAL INDUSTRY MACHINERY	1.42	1.46	1.52	1.56	1.59	1.62	2.62

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
90. HEAT TREATERS, ANNEALERS, TEMPERERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
50. MISC. NONELECTRICAL MACH.	0.35	0.36	0.38	0.39	0.39	0.39	2.22
53. ELECTRICAL MACHINERY	0.48	0.49	0.51	0.53	0.53	0.54	2.08
55. ELECTRIC LIGHTING & WIRING EQ.	0.13	0.13	0.14	0.14	0.14	0.14	1.73
56. RADIO, TV, & COMMUNICATION EQ.	0.23	0.23	0.24	0.24	0.24	0.25	1.75
57. ELECTRONIC COMPONENTS & ACCESS.	0.41	0.43	0.45	0.47	0.49	0.50	3.65
59. MOTOR VEHICLES & EQUIPMENT	2.42	2.53	2.61	2.65	2.68	2.70	2.23
60. AIRCRAFT & PARTS	1.22	1.27	1.31	1.35	1.35	1.35	2.00
61. OTHER TRANSPORTATION EQ.	0.22	0.22	0.23	0.24	0.24	0.24	1.79
62. INSTRUMENTS & SUPPLIES	0.42	0.43	0.45	0.47	0.48	0.49	2.72
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.09	0.09	0.10	0.10	0.10	0.10	2.25
82. GOVERNMENT INDUSTRY	0.36	0.36	0.36	0.37	0.38	0.38	1.12
TOTAL, ALL INDUSTRIES	22.15	22.85	23.68	24.24	24.55	24.75	2.25

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE
BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
91. LAYOUT MARKERS, METAL
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	0.15	0.17	0.19	0.20	0.22	0.23	8.76
37. PRIMARY FERROUS METALS	0.04	0.05	0.05	0.05	0.06	0.06	7.78
38. NONFERROUS METALS	0.01	0.01	0.01	0.01	0.02	0.02	9.24
40. FAB. STRUCTURAL METAL PRODUCTS	0.32	0.36	0.38	0.40	0.42	0.44	6.64
41. SCREW MACHINE PROD.&STAMPINGS	0.02	0.02	0.03	0.03	0.03	0.03	7.69
42. OTHER FAB. METAL PRODUCTS	0.02	0.03	0.03	0.03	0.04	0.04	9.89
43. ENGINES & TURBINES	0.01	0.01	0.01	0.02	0.02	0.02	7.71
45. CONSTR. & MINING MACHINERY	0.02	0.02	0.02	0.02	0.03	0.03	7.24
46. MATERIALS HANDLING MACH. & EQ.	0.03	0.04	0.04	0.04	0.05	0.05	9.12
47. METALWORKING MACH. & EQ.	0.02	0.03	0.03	0.03	0.03	0.03	9.35
49. GENERAL INDUSTRY MACHINERY	0.03	0.03	0.03	0.03	0.04	0.04	7.51
50. MISC. NONELECTRICAL MACH.	0.02	0.02	0.02	0.02	0.02	0.02	7.54
52. SERVICE INDUSTRY MACHINES	0.01	0.01	0.01	0.01	0.01	0.02	13.36
53. ELECTRICAL MACHINERY	0.02	0.02	0.02	0.02	0.02	0.02	8.95
56. RADIO,TV, & COMMUNICATION EQ.	0.09	0.10	0.11	0.12	0.13	0.13	8.30
57. ELECTRONIC COMPONENTS & ACCESS.	0.04	0.04	0.05	0.05	0.06	0.06	11.34
59. MOTOR VEHICLES & EQUIPMENT	0.01	0.01	0.01	0.01	0.01	0.01	17.13
60. AIRCRAFT & PARTS	0.67	0.75	0.83	0.92	0.98	1.01	8.59
61. OTHER TRANSPORTATION EQ.	0.23	0.25	0.25	0.26	0.27	0.27	3.31
62. INSTRUMENTS & SUPPLIES	0.01	0.02	0.02	0.02	0.02	0.02	8.02
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.05	0.06	0.06	0.06	0.07	0.07	5.03
TOTAL, ALL INDUSTRIES	1.83	2.05	2.21	2.40	2.55	2.64	7.62
TOTAL EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	0.24	0.25	0.26	0.27	0.27	0.28	2.61
37. PRIMARY FERROUS METALS	0.58	0.60	0.62	0.63	0.63	0.63	1.41
38. NONFERROUS METALS	0.12	0.13	0.13	0.14	0.14	0.14	2.65
40. FAB. STRUCTURAL METAL PRODUCTS	7.15	7.10	7.21	7.38	7.47	7.50	0.96
41. SCREW MACHINE PROD.&STAMPINGS	0.36	0.37	0.39	0.39	0.39	0.40	2.16
42. OTHER FAB. METAL PRODUCTS	0.51	0.52	0.55	0.57	0.58	0.59	3.18
43. ENGINES & TURBINES	0.14	0.15	0.15	0.15	0.16	0.16	1.77
45. CONSTR. & MINING MACHINERY	1.54	1.63	1.71	1.77	1.82	1.84	3.64
46. MATERIALS HANDLING MACH. & EQ.	0.55	0.57	0.60	0.63	0.64	0.66	3.62
47. METALWORKING MACH. & EQ.	0.43	0.45	0.47	0.49	0.51	0.52	3.75
49. GENERAL INDUSTRY MACHINERY	0.59	0.61	0.64	0.65	0.66	0.67	2.62
50. MISC. NONELECTRICAL MACH.	0.14	0.15	0.15	0.16	0.16	0.16	2.23

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
91. LAYOUT MARKERS, METAL
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
52. SERVICE INDUSTRY MACHINES	0.47	0.48	0.51	0.52	0.52	0.52	2.09
53. ELECTRICAL MACHINERY	0.31	0.32	0.33	0.34	0.34	0.34	1.91
56. RADIO,TV, & COMMUNICATION EQ.	0.21	0.22	0.22	0.23	0.23	0.24	2.14
57. ELECTRONIC COMPONENTS & ACCESS.	0.16	0.17	0.18	0.19	0.19	0.20	3.62
59. MOTOR VEHICLES & EQUIPMENT	0.33	0.34	0.36	0.36	0.36	0.37	2.22
60. AIRCRAFT & PARTS	1.34	1.39	1.43	1.47	1.48	1.48	2.00
61. OTHER TRANSPORTATION EQ.	0.80	0.83	0.86	0.87	0.88	0.88	1.90
62. INSTRUMENTS & SUPPLIES	0.12	0.12	0.13	0.13	0.14	0.14	2.57
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.52	0.53	0.55	0.56	0.57	0.57	1.94
TOTAL, ALL INDUSTRIES	17.85	18.17	18.73	19.23	19.50	19.65	1.94

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
92. MACH. TOOL SETTERS, METALWORKING
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	0.31	0.35	0.38	0.40	0.42	0.43	6.82
23. OTHER FURNITURE & FIXTURES	0.01	0.01	0.01	0.01	0.01	0.01	4.81
36. STONE & CLAY PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	8.51
37. PRIMARY FERROUS METALS	0.03	0.03	0.03	0.04	0.04	0.04	8.19
38. NONFERROUS METALS	0.10	0.11	0.13	0.14	0.15	0.16	9.30
40. FAB. STRUCTURAL METAL PRODUCTS	0.11	0.12	0.13	0.14	0.15	0.16	8.40
41. SCREW MACHINE PROD.&STAMPINGS	0.20	0.22	0.24	0.26	0.28	0.29	7.75
42. OTHER FAB. METAL PRODUCTS	0.09	0.10	0.11	0.12	0.13	0.14	10.06
43. ENGINES & TURBINES	0.03	0.03	0.03	0.03	0.04	0.04	7.69
45. CONSTR. & MINING MACHINERY	0.01	0.01	0.01	0.01	0.01	0.01	7.25
46. MATERIALS HANDLING MACH. & EQ.	0.01	0.01	0.02	0.02	0.02	0.02	9.13
47. METALWORKING MACH. & EQ.	0.14	0.16	0.18	0.20	0.21	0.22	9.36
48. SPECIAL INDUSTRY MACHINERY	0.01	0.01	0.01	0.01	0.01	0.01	12.05
49. GENERAL INDUSTRY MACHINERY	0.18	0.20	0.22	0.23	0.25	0.26	7.51
50. MISC. NONELECTRICAL MACH.	0.37	0.40	0.44	0.49	0.52	0.53	7.54
51. OFFICE,COMPUTING & ACCT. MACH.	0.04	0.04	0.05	0.05	0.05	0.05	7.32
52. SERVICE INDUSTRY MACHINES	0.02	0.02	0.02	0.03	0.03	0.03	13.36
53. ELECTRICAL MACHINERY	0.09	0.10	0.11	0.12	0.13	0.14	9.17
55. ELECTRIC LIGHTING & WIRING EQ.	0.04	0.05	0.05	0.06	0.06	0.06	8.25
56. RADIO,TV, & COMMUNICATION EQ.	0.86	0.99	1.09	1.18	1.24	1.27	8.04
57. ELECTRONIC COMPONENTS & ACCESS.	0.12	0.15	0.17	0.19	0.20	0.21	11.38
58. MISC. ELECTRICAL MACH. & EQ.	0.01	0.01	0.01	0.01	0.01	0.01	9.52
59. MOTOR VEHICLES & EQUIPMENT	0.21	0.26	0.29	0.35	0.41	0.47	17.14
60. AIRCRAFT & PARTS	1.93	2.18	2.40	2.65	2.84	2.91	8.60
61. OTHER TRANSPORTATION EQ.	0.05	0.06	0.06	0.06	0.06	0.06	3.55
62. INSTRUMENTS & SUPPLIES	0.23	0.26	0.28	0.31	0.33	0.34	8.16
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.02	0.03	0.03	0.03	0.03	0.04	8.55
64. MISC. MANUFACTURING	0.01	0.01	0.01	0.01	0.01	0.01	6.72
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.03	0.03	0.04	0.04	0.04	0.04	3.69
82. GOVERNMENT INDUSTRY	2.69	2.63	2.64	2.68	2.67	2.64	-0.33
TOTAL, ALL INDUSTRIES	7.95	8.59	9.19	9.86	10.36	10.63	5.99
TOTAL EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	0.51	0.52	0.52	0.53	0.53	0.53	0.78
23. OTHER FURNITURE & FIXTURES	0.56	0.56	0.58	0.60	0.61	0.63	2.39
36. STONE & CLAY PRODUCTS	0.22	0.22	0.23	0.23	0.24	0.23	1.26

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
92. MACH. TOOL SETTERS, METALWORKING
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
37. PRIMARY FERROUS METALS	0.38	0.39	0.40	0.41	0.41	0.41	1.80
38. NONFERROUS METALS	1.18	1.22	1.27	1.30	1.33	1.34	2.71
40. FAB. STRUCTURAL METAL PRODUCTS	2.42	2.44	2.52	2.62	2.70	2.75	2.63
41. SCREW MACHINE PROD.&STAMPINGS	3.28	3.44	3.56	3.62	3.64	3.66	2.22
42. OTHER FAB. METAL PRODUCTS	1.85	1.92	2.01	2.08	2.13	2.18	3.34
43. ENGINES & TURBINES	0.31	0.32	0.33	0.34	0.34	0.34	1.76
45. CONSTR. & MINING MACHINERY	0.61	0.65	0.68	0.71	0.73	0.73	3.65
46. MATERIALS HANDLING MACH. & EQ.	0.22	0.23	0.24	0.25	0.26	0.26	3.63
47. METALWORKING MACH. & EQ.	2.75	2.86	3.03	3.15	3.24	3.31	3.76
48. SPECIAL INDUSTRY MACHINERY	0.80	0.82	0.86	0.89	0.92	0.94	3.21
49. GENERAL INDUSTRY MACHINERY	4.08	4.18	4.38	4.49	4.57	4.64	2.62
50. MISC. NONELECTRICAL MACH.	3.23	3.32	3.46	3.53	3.57	3.61	2.23
51. OFFICE,COMPUTING & ACCT. MACH.	0.97	1.01	1.05	1.07	1.08	1.11	2.73
52. SERVICE INDUSTRY MACHINES	0.96	1.00	1.04	1.06	1.06	1.06	2.10
53. ELECTRICAL MACHINERY	1.76	1.79	1.88	1.92	1.94	1.96	2.11
55. ELECTRIC LIGHTING & WIRING EQ.	0.88	0.89	0.91	0.93	0.95	0.96	1.70
56. RADIO,TV, & COMMUNICATION EQ.	2.04	2.08	2.15	2.18	2.20	2.24	1.89
57. ELECTRONIC COMPONENTS & ACCESS.	0.57	0.59	0.62	0.65	0.66	0.68	3.66
58. MISC. ELECTRICAL MACH. & EQ.	0.28	0.29	0.30	0.30	0.31	0.31	2.07
59. MOTOR VEHICLES & EQUIPMENT	11.10	11.60	12.00	12.19	12.32	12.39	2.23
60. AIRCRAFT & PARTS	3.86	4.02	4.13	4.26	4.27	4.26	2.00
61. OTHER TRANSPORTATION EQ.	0.18	0.19	0.20	0.20	0.20	0.20	2.14
62. INSTRUMENTS & SUPPLIES	1.99	2.02	2.10	2.18	2.24	2.27	2.71
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.56	0.57	0.59	0.62	0.64	0.66	3.19
64. MISC. MANUFACTURING	0.93	0.95	0.99	1.02	1.05	1.06	2.66
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.20	0.21	0.22	0.22	0.23	0.23	2.45
82. GOVERNMENT INDUSTRY	0.19	0.19	0.19	0.19	0.19	0.19	-0.50
TOTAL, ALL INDUSTRIES	50.29	51.95	53.94	55.32	56.13	56.75	2.45

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
93. MACHINISTS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
5. IRON ORE MINING	0.01	0.01	0.02	0.02	0.02	0.02	7.71
6. NONFERROUS METAL MINING	0.07	0.09	0.10	0.11	0.12	0.13	11.60
7. COAL MINING	0.02	0.03	0.03	0.03	0.03	0.03	9.08
8. CRUDE PETROLEUM & N. GAS	0.04	0.05	0.05	0.05	0.06	0.06	5.24
9. STONE&CLAY MINING & QUARRYING	0.01	0.01	0.01	0.01	0.01	0.01	9.55
11. NEW CONSTRUCTION	0.03	0.04	0.04	0.04	0.05	0.05	9.00
13. ORDNANCE & ACCESSORIES	1.24	1.39	1.51	1.63	1.71	1.77	7.35
14. FOOD & KINDRED PRODUCTS	0.04	0.05	0.05	0.05	0.05	0.05	5.05
16. FABRIC,YARN & THREAD MILLS	0.03	0.03	0.03	0.03	0.04	0.04	4.97
17. MISC. TEXTILE GOODS	0.01	0.01	0.01	0.01	0.01	0.01	7.12
19. MISC. FABRICATED TEXTILE PROD.	0.01	0.01	0.01	0.01	0.01	0.02	4.69
20. LUMBER & WOOD PRODUCTS	0.03	0.03	0.04	0.04	0.04	0.05	9.62
23. OTHER FURNITURE & FIXTURES	0.01	0.01	0.01	0.01	0.01	0.01	4.19
24. PAPER & ALLIED PRODUCTS	0.08	0.08	0.09	0.10	0.10	0.11	6.73
25. PAPERBOARD CONTAINERS & BOXES	0.02	0.02	0.03	0.03	0.03	0.03	8.78
26. PRINTING & PUBLISHING	0.04	0.04	0.05	0.05	0.05	0.05	5.97
27. CHEMICALS & PRODUCTS	0.13	0.15	0.16	0.17	0.18	0.19	7.90
28. PLASTICS & SYNTHETIC MATLS.	0.04	0.05	0.05	0.06	0.06	0.06	8.71
29. DRUGS,CLEANING & TOILET PREP.	0.01	0.01	0.01	0.01	0.01	0.01	4.14
30. PAINTS & ALLIED PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.02	8.21
31. PET REFINING & REL. PROD.	0.12	0.13	0.14	0.15	0.15	0.16	5.23
32. RUBBER & MISC. PLASTICS PROD.	0.24	0.27	0.30	0.34	0.37	0.39	10.42
35. GLASS & GLASS PRODUCTS	0.02	0.02	0.03	0.03	0.03	0.03	9.76
36. STONE & CLAY PRODUCTS	0.07	0.08	0.08	0.09	0.09	0.10	7.40
37. PRIMARY FERROUS METALS	0.52	0.58	0.63	0.69	0.73	0.77	8.05
38. NONFERROUS METALS	0.43	0.49	0.55	0.61	0.66	0.69	9.98
39. METAL CONTAINERS	0.03	0.04	0.04	0.04	0.04	0.05	7.00
40. FAB. STRUCTURAL METAL PRODUCTS	0.32	0.36	0.39	0.42	0.45	0.47	7.89
41. SCREW MACHINE PROD.&STAMPINGS	0.36	0.40	0.43	0.47	0.50	0.52	7.88
42. OTHER FAB. METAL PRODUCTS	0.25	0.29	0.31	0.34	0.37	0.39	9.12
43. ENGINES & TURBINES	0.13	0.15	0.16	0.17	0.18	0.19	8.17
45. CONSTR. & MINING MACHINERY	0.07	0.08	0.08	0.09	0.09	0.10	7.24
46. MATERIALS HANDLING MACH. & EQ.	0.12	0.14	0.15	0.16	0.17	0.18	9.12
47. METALWORKING MACH. & EQ.	0.88	1.02	1.13	1.26	1.36	1.43	10.08
48. SPECIAL INDUSTRY MACHINERY	0.04	0.05	0.05	0.06	0.07	0.07	12.06
49. GENERAL INDUSTRY MACHINERY	0.23	0.26	0.28	0.30	0.32	0.33	7.51
50. MISC. NONELECTRICAL MACH.	1.65	1.81	2.00	2.21	2.37	2.46	8.30

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
93. MACHINISTS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
51. OFFICE,COMPUTING & ACCT. MACH.	0.07	0.08	0.08	0.09	0.09	0.10	7.32
52. SERVICE INDUSTRY MACHINES	0.01	0.02	0.02	0.02	0.02	0.03	13.37
53. ELECTRICAL MACHINERY	0.14	0.16	0.18	0.20	0.21	0.22	9.19
55. ELECTRIC LIGHTING & WIRING EQ.	0.08	0.09	0.10	0.11	0.12	0.12	8.25
56. RADIO,TV, & COMMUNICATION EQ.	1.65	1.83	1.94	2.03	2.05	2.02	4.07
57. ELECTRONIC COMPONENTS & ACCESS.	0.72	0.86	0.97	1.08	1.18	1.23	11.37
58. MISC. ELECTRICAL MACH. & EQ.	0.04	0.04	0.05	0.05	0.05	0.06	9.57
59. MOTOR VEHICLES & EQUIPMENT	0.05	0.06	0.07	0.09	0.10	0.12	17.14
60. AIRCRAFT & PARTS	2.95	3.34	3.68	4.06	4.34	4.46	8.59
61. OTHER TRANSPORTATION EQ.	1.78	1.87	1.94	1.98	2.04	2.10	3.38
62. INSTRUMENTS & SUPPLIES	0.71	0.80	0.87	0.95	1.01	1.05	8.20
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.10	0.11	0.12	0.13	0.14	0.15	8.62
64. MISC. MANUFACTURING	0.02	0.02	0.02	0.02	0.03	0.03	6.53
65. TRANSPORTATION & WAREHOUSING	0.47	0.49	0.51	0.53	0.54	0.54	2.59
68. UTILITIES	0.07	0.08	0.08	0.09	0.09	0.09	6.12
69. WHOLESALE & RETAIL TRADE	0.07	0.08	0.08	0.09	0.10	0.11	9.70
72. PERSONAL SERVICES EXC. AUTO.	0.28	0.33	0.37	0.42	0.47	0.50	12.30
73. BUSINESS SERVICES	0.15	0.17	0.19	0.21	0.22	0.23	7.86
75. AUTOMOBILE REPAIR & SERVICE	0.08	0.08	0.09	0.10	0.10	0.10	6.79
77. MISC. SERVICES	0.03	0.03	0.04	0.04	0.04	0.04	3.28
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.91	0.95	1.00	1.05	1.09	1.10	3.79
82. GOVERNMENT INDUSTRY	10.82	10.61	10.82	11.12	11.30	11.38	1.00
TOTAL, ALL INDUSTRIES	28.62	30.42	32.27	34.37	35.95	36.84	5.18

TOTAL EMPLOYMENT

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
5. IRON ORE MINING	0.24	0.26	0.27	0.27	0.27	0.26	1.56
6. NONFERROUS METAL MINING	1.25	1.33	1.39	1.43	1.43	1.45	2.98
7. COAL MINING	0.79	0.83	0.87	0.89	0.92	0.94	3.38
8. CRUDE PETROLEUM & N. GAS	0.59	0.60	0.60	0.59	0.59	0.60	0.41
9. STONE&CLAY MINING & QUARRYING	0.27	0.28	0.29	0.30	0.30	0.31	2.18
11. NEW CONSTRUCTION	0.85	0.87	0.89	0.92	0.95	0.96	2.56
13. ORDNANCE & ACCESSORIES	2.05	2.09	2.11	2.15	2.17	2.18	1.28
14. FOOD & KINDRED PRODUCTS	6.40	6.48	6.52	6.50	6.43	6.38	-0.06
16. FABRIC,YARN & THREAD MILLS	2.28	2.34	2.40	2.44	2.46	2.46	1.58
17. MISC. TEXTILE GOODS	0.54	0.56	0.58	0.60	0.61	0.62	2.73
19. MISC. FABRICATED TEXTILE PROD.	0.41	0.42	0.43	0.44	0.45	0.45	1.87
20. LUMBER & WOOD PRODUCTS	1.39	1.52	1.59	1.66	1.68	1.68	3.77
23. OTHER FURNITURE & FIXTURES	0.72	0.72	0.74	0.76	0.77	0.78	1.78

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
93. MACHINISTS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
24. PAPER & ALLIED PRODUCTS	4.11	4.23	4.28	4.30	4.30	4.29	0.89
25. PAPERBOARD CONTAINERS & BOXES	0.95	0.97	0.99	1.01	1.02	1.03	1.72
26. PRINTING & PUBLISHING	2.61	2.61	2.63	2.64	2.65	2.65	0.36
27. CHEMICALS & PRODUCTS	2.76	2.82	2.87	2.90	2.93	2.95	1.36
28. PLASTICS & SYNTHETIC MATLS.	1.69	1.75	1.81	1.86	1.88	1.89	2.31
29. DRUGS,CLEANING & TOILET PREP.	2.38	2.39	2.43	2.46	2.46	2.47	0.74
30. PAINTS & ALLIED PRODUCTS	0.20	0.21	0.22	0.22	0.23	0.23	2.98
31. PET REFINING & REL. PROD.	2.28	2.28	2.29	2.32	2.32	2.32	0.30
32. RUBBER & MISC. PLASTICS PROD.	8.73	9.04	9.43	9.74	10.00	10.11	2.99
35. GLASS & GLASS PRODUCTS	0.97	0.99	1.01	1.02	1.02	1.02	1.02
36. STONE & CLAY PRODUCTS	2.10	2.13	2.14	2.18	2.17	2.13	0.22
37. PRIMARY FERROUS METALS	7.30	7.54	7.80	7.91	7.95	7.93	1.67
38. NONFERROUS METALS	5.07	5.29	5.53	5.73	5.86	5.97	3.35
39. METAL CONTAINERS	2.27	2.25	2.26	2.31	2.33	2.35	0.72
40. FAB. STRUCTURAL METAL PRODUCTS	7.22	7.26	7.45	7.72	7.90	8.03	2.14
41. SCREW MACHINE PROD.&STAMPINGS	5.79	6.10	6.31	6.42	6.47	6.50	2.34
42. OTHER FAB. METAL PRODUCTS	5.46	5.60	5.81	5.96	6.06	6.17	2.46
43. ENGINES & TURBINES	1.55	1.60	1.67	1.70	1.71	1.73	2.20
45. CONSTR. & MINING MACHINERY	5.81	6.14	6.46	6.69	6.87	6.95	3.64
46. MATERIALS HANDLING MACH. & EQ.	2.08	2.14	2.27	2.37	2.43	2.48	3.62
47. METALWORKING MACH. & EQ.	17.19	18.01	19.21	20.13	20.84	21.37	4.45
48. SPECIAL INDUSTRY MACHINERY	5.52	5.64	5.92	6.19	6.34	6.47	3.22
49. GENERAL INDUSTRY MACHINERY	5.23	5.36	5.61	5.76	5.85	5.95	2.62
50. MISC. NONELECTRICAL MACH.	14.42	14.91	15.66	16.12	16.38	16.68	2.95
51. OFFICE,COMPUTING & ACCT. MACH.	1.81	1.88	1.96	1.99	2.02	2.07	2.72
52. SERVICE INDUSTRY MACHINES	0.81	0.84	0.88	0.89	0.90	0.90	2.10
53. ELECTRICAL MACHINERY	2.86	2.91	3.05	3.12	3.16	3.18	2.13
55. ELECTRIC LIGHTING & WIRING EQ.	1.69	1.71	1.75	1.79	1.82	1.84	1.70
56. RADIO,TV, & COMMUNICATION EQ.	3.92	3.86	3.84	3.76	3.65	3.57	-1.85
57. ELECTRONIC COMPONENTS & ACCESS.	3.29	3.43	3.60	3.75	3.85	3.93	3.65
58. MISC. ELECTRICAL MACH. & EQ.	1.35	1.39	1.45	1.47	1.48	1.50	2.12
59. MOTOR VEHICLES & EQUIPMENT	2.74	2.87	2.96	3.01	3.04	3.06	2.23
60. AIRCRAFT & PARTS	5.91	6.15	6.31	6.51	6.53	6.52	2.00
61. OTHER TRANSPORTATION EQ.	6.14	6.32	6.55	6.69	6.71	6.77	1.97
62. INSTRUMENTS & SUPPLIES	6.08	6.18	6.43	6.67	6.85	6.96	2.74
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	2.31	2.35	2.45	2.56	2.65	2.71	3.25
64. MISC. MANUFACTURING	1.71	1.74	1.81	1.87	1.90	1.93	2.48
65. TRANSPORTATION & WAREHOUSING	11.15	11.21	11.25	11.32	11.19	10.99	-0.28
68. UTILITIES	3.23	3.24	3.25	3.25	3.26	3.26	0.16

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
93. MACHINISTS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
69. WHOLESALE & RETAIL TRADE	10.90	11.26	11.62	11.93	12.17	12.43	2.65
72. PERSONAL SERVICES EXC. AUTO.	15.40	16.29	17.26	18.23	19.21	20.15	5.53
73. BUSINESS SERVICES	3.19	3.27	3.36	3.46	3.55	3.61	2.50
75. AUTOMOBILE REPAIR & SERVICE	5.18	5.26	5.28	5.28	5.29	5.32	0.51
77. MISC. SERVICES	5.24	5.27	5.31	5.39	5.49	5.60	1.34
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	7.44	7.63	7.87	8.07	8.21	8.31	2.24
82. GOVERNMENT INDUSTRY	27.95	27.86	28.08	28.53	28.98	29.37	1.00
TOTAL, ALL INDUSTRIES	267.00	273.79	282.49	289.67	294.46	298.26	2.24

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
94. MOLDERS, METAL
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	0.03	0.03	0.03	0.03	0.03	0.04	6.84
35. GLASS & GLASS PRODUCTS	0.06	0.07	0.07	0.08	0.08	0.09	7.64
36. STONE & CLAY PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	8.11
37. PRIMARY FERROUS METALS	0.96	1.05	1.12	1.20	1.26	1.29	6.10
38. NONFERROUS METALS	0.51	0.58	0.63	0.69	0.74	0.77	8.70
40. FAB. STRUCTURAL METAL PRODUCTS	0.05	0.06	0.06	0.07	0.08	0.08	8.98
41. SCREW MACHINE PROD.&STAMPINGS	0.02	0.02	0.02	0.02	0.03	0.03	7.66
42. OTHER FAB. METAL PRODUCTS	0.03	0.04	0.04	0.05	0.05	0.06	10.12
43. ENGINES & TURBINES	0.02	0.03	0.03	0.03	0.03	0.03	7.68
45. CONSTR. & MINING MACHINERY	0.01	0.01	0.01	0.01	0.01	0.01	7.25
46. MATERIALS HANDLING MACH. & EQ.	0.01	0.01	0.01	0.01	0.01	0.02	9.13
47. METALWORKING MACH. & EQ.	0.07	0.09	0.09	0.10	0.11	0.12	9.36
49. GENERAL INDUSTRY MACHINERY	0.03	0.04	0.04	0.04	0.05	0.05	7.52
50. MISC. NONELECTRICAL MACH.	0.02	0.02	0.03	0.03	0.03	0.03	7.50
53. ELECTRICAL MACHINERY	0.01	0.01	0.01	0.01	0.01	0.01	9.04
55. ELECTRIC LIGHTING & WIRING EQ.	0.05	0.06	0.06	0.07	0.08	0.08	8.25
56. RADIO,TV, & COMMUNICATION EQ.	0.05	0.05	0.06	0.06	0.07	0.07	8.30
57. ELECTRONIC COMPONENTS & ACCESS.	0.08	0.09	0.10	0.12	0.13	0.13	11.35
59. MOTOR VEHICLES & EQUIPMENT	0.01	0.01	0.01	0.01	0.02	0.02	17.17
60. AIRCRAFT & PARTS	0.11	0.13	0.14	0.15	0.16	0.17	8.64
61. OTHER TRANSPORTATION EQ.	0.05	0.05	0.05	0.05	0.05	0.06	3.07
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.04	0.04	0.05	0.05	0.05	0.05	5.58
82. GOVERNMENT INDUSTRY	0.04	0.04	0.04	0.04	0.04	0.04	-0.33
TOTAL, ALL INDUSTRIES	2.29	2.55	2.75	2.98	3.16	3.27	7.40
TOTAL EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	0.04	0.04	0.04	0.04	0.04	0.04	0.80
35. GLASS & GLASS PRODUCTS	2.67	2.68	2.68	2.66	2.61	2.55	-0.93
36. STONE & CLAY PRODUCTS	0.17	0.18	0.18	0.18	0.19	0.18	0.89
37. PRIMARY FERROUS METALS	13.48	13.65	13.85	13.79	13.63	13.36	-0.17
38. NONFERROUS METALS	6.01	6.20	6.41	6.56	6.63	6.68	2.15
40. FAB. STRUCTURAL METAL PRODUCTS	1.18	1.20	1.24	1.30	1.34	1.38	3.17
41. SCREW MACHINE PROD.&STAMPINGS	0.29	0.31	0.32	0.32	0.33	0.33	2.13
42. OTHER FAB. METAL PRODUCTS	0.76	0.78	0.82	0.85	0.87	0.89	3.40
43. ENGINES & TURBINES	0.29	0.30	0.31	0.31	0.32	0.32	1.75
45. CONSTR. & MINING MACHINERY	0.49	0.51	0.54	0.56	0.58	0.58	3.65

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
94. MOLDERS, METAL
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
46. MATERIALS HANDLING MACH. & EQ.	0.17	0.18	0.19	0.20	0.20	0.21	3.63
47. METALWORKING MACH. & EQ.	1.44	1.50	1.59	1.65	1.70	1.73	3.76
49. GENERAL INDUSTRY MACHINERY	0.74	0.76	0.80	0.82	0.83	0.85	2.63
50. MISC. NONELECTRICAL MACH.	0.19	0.19	0.20	0.21	0.21	0.21	2.19
53. ELECTRICAL MACHINERY	0.15	0.15	0.16	0.16	0.17	0.17	1.99
55. ELECTRIC LIGHTING & WIRING EQ.	1.11	1.12	1.15	1.17	1.19	1.21	1.70
56. RADIO,TV, & COMMUNICATION EQ.	0.11	0.11	0.12	0.12	0.12	0.12	2.14
57. ELECTRONIC COMPONENTS & ACCESS.	0.35	0.37	0.39	0.40	0.41	0.42	3.64
59. MOTOR VEHICLES & EQUIPMENT	0.47	0.49	0.51	0.52	0.52	0.52	2.25
60. AIRCRAFT & PARTS	0.22	0.23	0.24	0.25	0.25	0.25	2.04
61. OTHER TRANSPORTATION EQ.	0.17	0.17	0.18	0.18	0.18	0.18	1.66
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.55	0.56	0.57	0.58	0.58	0.58	1.13
82. GOVERNMENT INDUSTRY	0.17	0.17	0.17	0.17	0.17	0.17	0.37
TOTAL, ALL INDUSTRIES	32.75	33.41	34.27	34.68	34.75	34.65	1.13

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
95. MOLDERS, BENCH&FLOOR
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	0.02	0.03	0.03	0.03	0.03	0.03	6.61
37. PRIMARY FERROUS METALS	0.31	0.34	0.37	0.39	0.41	0.42	6.11
38. NONFERROUS METALS	0.20	0.23	0.25	0.27	0.29	0.30	8.68
40. FAB. STRUCTURAL METAL PRODUCTS	0.03	0.03	0.03	0.03	0.04	0.04	8.67
42. OTHER FAB. METAL PRODUCTS	0.01	0.01	0.01	0.01	0.02	0.02	10.10
43. ENGINES & TURBINES	0.01	0.01	0.01	0.01	0.01	0.01	7.68
47. METALWORKING MACH. & EQ.	0.03	0.03	0.03	0.04	0.04	0.04	9.35
49. GENERAL INDUSTRY MACHINERY	0.02	0.02	0.02	0.02	0.03	0.03	7.51
50. MISC. NONELECTRICAL MACH.	0.02	0.02	0.02	0.02	0.02	0.02	7.51
55. ELECTRIC LIGHTING & WIRING EQ.	0.02	0.03	0.03	0.03	0.03	0.03	8.25
56. RADIO,TV, & COMMUNICATION EQ.	0.01	0.02	0.02	0.02	0.02	0.02	8.39
60. AIRCRAFT & PARTS	0.07	0.08	0.08	0.09	0.10	0.10	8.61
61. OTHER TRANSPORTATION EQ.	0.01	0.01	0.01	0.01	0.01	0.01	3.54
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.02	0.02	0.02	0.02	0.02	0.02	5.63
TOTAL, ALL INDUSTRIES	0.80	0.89	0.96	1.04	1.10	1.14	7.47
TOTAL EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	0.04	0.04	0.04	0.04	0.04	0.04	0.58
37. PRIMARY FERROUS METALS	4.41	4.47	4.53	4.51	4.46	4.37	-0.15
38. NONFERROUS METALS	2.36	2.43	2.51	2.57	2.60	2.62	2.13
40. FAB. STRUCTURAL METAL PRODUCTS	0.58	0.59	0.61	0.64	0.66	0.67	2.88
42. OTHER FAB. METAL PRODUCTS	0.23	0.24	0.25	0.26	0.26	0.27	3.38
43. ENGINES & TURBINES	0.11	0.12	0.12	0.12	0.12	0.12	1.74
47. METALWORKING MACH. & EQ.	0.53	0.55	0.58	0.60	0.62	0.63	3.75
49. GENERAL INDUSTRY MACHINERY	0.44	0.45	0.47	0.48	0.49	0.50	2.62
50. MISC. NONELECTRICAL MACH.	0.13	0.13	0.14	0.14	0.14	0.15	2.20
55. ELECTRIC LIGHTING & WIRING EQ.	0.48	0.49	0.50	0.51	0.52	0.53	1.70
56. RADIO,TV, & COMMUNICATION EQ.	0.03	0.03	0.04	0.04	0.04	0.04	2.22
60. AIRCRAFT & PARTS	0.14	0.14	0.15	0.15	0.15	0.15	2.02
61. OTHER TRANSPORTATION EQ.	0.04	0.04	0.05	0.05	0.05	0.05	2.12
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.21	0.22	0.22	0.23	0.23	0.23	1.39
TOTAL, ALL INDUSTRIES	10.68	10.91	11.22	11.38	11.44	11.44	1.39

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
96. MOLDERS, MACHINE
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
37. PRIMARY FERROUS METALS	0.49	0.53	0.57	0.61	0.64	0.65	6.08
38. NONFERROUS METALS	0.24	0.27	0.30	0.32	0.35	0.36	8.72
40. FAB. STRUCTURAL METAL PRODUCTS	0.03	0.03	0.03	0.04	0.04	0.04	9.27
41. SCREW MACHINE PROD.&STAMPINGS	0.02	0.02	0.02	0.02	0.02	0.02	7.67
42. OTHER FAB. METAL PRODUCTS	0.02	0.03	0.03	0.03	0.04	0.04	10.13
43. ENGINES & TURBINES	0.01	0.02	0.02	0.02	0.02	0.02	7.68
47. METALWORKING MACH. & EQ.	0.05	0.05	0.06	0.07	0.07	0.07	9.36
49. GENERAL INDUSTRY MACHINERY	0.01	0.02	0.02	0.02	0.02	0.02	7.54
50. MISC. NONELECTRICAL MACH.	0.01	0.01	0.01	0.01	0.01	0.01	7.46
55. ELECTRIC LIGHTING & WIRING EQ.	0.03	0.03	0.04	0.04	0.04	0.04	8.26
56. RADIO,TV, & COMMUNICATION EQ.	0.03	0.04	0.04	0.05	0.05	0.05	8.26
57. ELECTRONIC COMPONENTS & ACCESS.	0.08	0.09	0.10	0.12	0.13	0.13	11.35
59. MOTOR VEHICLES & EQUIPMENT	0.01	0.01	0.01	0.01	0.02	0.02	17.16
60. AIRCRAFT & PARTS	0.04	0.05	0.05	0.06	0.06	0.07	8.67
61. OTHER TRANSPORTATION EQ.	0.04	0.04	0.04	0.04	0.04	0.04	2.91
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.02	0.03	0.03	0.03	0.03	0.03	5.84
TOTAL, ALL INDUSTRIES	1.15	1.29	1.39	1.51	1.60	1.66	7.68
TOTAL EMPLOYMENT							
37. PRIMARY FERROUS METALS	6.83	6.92	7.02	6.99	6.91	6.77	-0.18
38. NONFERROUS METALS	2.81	2.89	3.00	3.07	3.10	3.13	2.17
40. FAB. STRUCTURAL METAL PRODUCTS	0.59	0.61	0.63	0.66	0.69	0.70	3.45
41. SCREW MACHINE PROD.&STAMPINGS	0.25	0.26	0.27	0.27	0.27	0.27	2.14
42. OTHER FAB. METAL PRODUCTS	0.53	0.55	0.57	0.59	0.61	0.62	3.41
43. ENGINES & TURBINES	0.18	0.18	0.19	0.19	0.19	0.19	1.75
47. METALWORKING MACH. & EQ.	0.91	0.95	1.01	1.05	1.08	1.10	3.76
49. GENERAL INDUSTRY MACHINERY	0.31	0.31	0.33	0.34	0.34	0.35	2.64
50. MISC. NONELECTRICAL MACH.	0.06	0.06	0.06	0.06	0.06	0.06	2.16
55. ELECTRIC LIGHTING & WIRING EQ.	0.62	0.63	0.65	0.66	0.67	0.68	1.71
56. RADIO,TV, & COMMUNICATION EQ.	0.08	0.08	0.08	0.08	0.08	0.09	2.10
57. ELECTRONIC COMPONENTS & ACCESS.	0.35	0.37	0.39	0.40	0.41	0.42	3.64
59. MOTOR VEHICLES & EQUIPMENT	0.43	0.45	0.47	0.48	0.48	0.48	2.25
60. AIRCRAFT & PARTS	0.09	0.09	0.09	0.10	0.10	0.10	2.07
61. OTHER TRANSPORTATION EQ.	0.12	0.13	0.13	0.13	0.13	0.13	1.50
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.32	0.32	0.33	0.34	0.34	0.34	1.43
TOTAL, ALL INDUSTRIES	15.80	16.17	16.65	16.89	16.97	16.96	1.43

2/1/83

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE
BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
97. MOLDERS, METAL NEC
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
35. GLASS & GLASS PRODUCTS	0.06	0.07	0.07	0.08	0.08	0.09	7.64
36. STONE & CLAY PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	8.11
37. PRIMARY FERROUS METALS	0.16	0.17	0.19	0.20	0.21	0.21	6.10
38. NONFERROUS METALS	0.07	0.08	0.09	0.10	0.10	0.11	8.69
82. GOVERNMENT INDUSTRY	0.04	0.04	0.04	0.04	0.04	0.04	-0.33
TOTAL, ALL INDUSTRIES	0.34	0.37	0.40	0.43	0.45	0.46	6.28
TOTAL EMPLOYMENT							
35. GLASS & GLASS PRODUCTS	2.67	2.68	2.68	2.66	2.61	2.55	-0.93
36. STONE & CLAY PRODUCTS	0.17	0.18	0.18	0.18	0.19	0.18	0.89
37. PRIMARY FERROUS METALS	2.23	2.26	2.30	2.29	2.26	2.22	-0.16
38. NONFERROUS METALS	0.85	0.87	0.90	0.92	0.93	0.94	2.13
82. GOVERNMENT INDUSTRY	0.01	0.01	0.01	0.01	0.01	0.01	-0.50
TOTAL, ALL INDUSTRIES	6.23	6.29	6.37	6.37	6.30	6.21	-0.06

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
98. PATTERNMAKERS, METAL
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	0.03	0.03	0.03	0.03	0.04	0.04	7.93
37. PRIMARY FERROUS METALS	0.05	0.06	0.06	0.07	0.07	0.07	6.12
38. NONFERROUS METALS	0.02	0.03	0.03	0.03	0.04	0.04	8.73
40. FAB. STRUCTURAL METAL PRODUCTS	0.02	0.02	0.02	0.02	0.03	0.03	8.26
42. OTHER FAB. METAL PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	10.12
47. METALWORKING MACH. & EQ.	0.01	0.01	0.01	0.01	0.01	0.01	9.34
49. GENERAL INDUSTRY MACHINERY	0.10	0.11	0.12	0.13	0.14	0.14	7.51
56. RADIO,TV, & COMMUNICATION EQ.	0.05	0.05	0.06	0.06	0.07	0.07	8.03
57. ELECTRONIC COMPONENTS & ACCESS.	0.04	0.04	0.05	0.05	0.06	0.06	11.34
59. MOTOR VEHICLES & EQUIPMENT	0.01	0.01	0.01	0.01	0.02	0.02	17.14
60. AIRCRAFT & PARTS	0.41	0.47	0.52	0.57	0.61	0.63	8.59
61. OTHER TRANSPORTATION EQ.	0.01	0.01	0.01	0.02	0.02	0.02	3.12
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.06	0.06	0.07	0.07	0.07	0.07	4.57
82. GOVERNMENT INDUSTRY	0.11	0.10	0.11	0.11	0.11	0.11	0.82
TOTAL, ALL INDUSTRIES	0.93	1.03	1.12	1.22	1.29	1.33	7.41
TOTAL EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	0.04	0.04	0.04	0.05	0.05	0.05	1.82
37. PRIMARY FERROUS METALS	0.74	0.75	0.76	0.76	0.75	0.74	-0.15
38. NONFERROUS METALS	0.28	0.29	0.30	0.31	0.31	0.32	2.17
40. FAB. STRUCTURAL METAL PRODUCTS	0.41	0.42	0.43	0.45	0.46	0.47	2.49
42. OTHER FAB. METAL PRODUCTS	0.13	0.14	0.15	0.15	0.16	0.16	3.40
47. METALWORKING MACH. & EQ.	0.16	0.16	0.17	0.18	0.19	0.19	3.74
49. GENERAL INDUSTRY MACHINERY	2.24	2.29	2.40	2.46	2.51	2.55	2.62
56. RADIO,TV, & COMMUNICATION EQ.	0.11	0.11	0.11	0.12	0.12	0.12	1.89
57. ELECTRONIC COMPONENTS & ACCESS.	0.16	0.17	0.18	0.19	0.19	0.20	3.62
59. MOTOR VEHICLES & EQUIPMENT	0.42	0.44	0.45	0.46	0.46	0.47	2.22
60. AIRCRAFT & PARTS	0.83	0.86	0.89	0.92	0.92	0.92	2.00
61. OTHER TRANSPORTATION EQ.	0.05	0.05	0.05	0.05	0.05	0.05	1.72
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.43	0.44	0.46	0.47	0.48	0.48	2.17
82. GOVERNMENT INDUSTRY	0.17	0.17	0.17	0.18	0.18	0.18	1.28
TOTAL, ALL INDUSTRIES	6.82	7.01	7.26	7.44	7.53	7.60	2.17

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
99. PUNCH PRESS SETTERS, METAL
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	0.16	0.18	0.19	0.21	0.22	0.23	8.02
23. OTHER FURNITURE & FIXTURES	0.01	0.01	0.01	0.01	0.01	0.01	4.77
37. PRIMARY FERROUS METALS	0.01	0.01	0.01	0.01	0.01	0.01	7.50
38. NONFERROUS METALS	0.02	0.03	0.03	0.03	0.03	0.04	8.87
39. METAL CONTAINERS	0.01	0.01	0.01	0.01	0.01	0.01	6.60
40. FAB. STRUCTURAL METAL PRODUCTS	0.09	0.10	0.11	0.12	0.13	0.14	8.01
41. SCREW MACHINE PROD.&STAMPINGS	0.17	0.19	0.21	0.23	0.24	0.25	7.69
42. OTHER FAB. METAL PRODUCTS	0.04	0.04	0.05	0.05	0.06	0.06	9.91
47. METALWORKING MACH. & EQ.	0.02	0.02	0.02	0.02	0.02	0.02	9.37
49. GENERAL INDUSTRY MACHINERY	0.02	0.02	0.02	0.03	0.03	0.03	7.49
50. MISC. NONELECTRICAL MACH.	0.01	0.01	0.02	0.02	0.02	0.02	7.59
51. OFFICE,COMPUTING & ACCT. MACH.	0.01	0.01	0.01	0.01	0.01	0.01	7.33
52. SERVICE INDUSTRY MACHINES	0.02	0.02	0.02	0.03	0.03	0.03	13.37
53. ELECTRICAL MACHINERY	0.04	0.05	0.05	0.06	0.06	0.07	8.93
55. ELECTRIC LIGHTING & WIRING EQ.	0.02	0.03	0.03	0.03	0.03	0.03	8.27
56. RADIO,TV, & COMMUNICATION EQ.	0.10	0.12	0.13	0.14	0.15	0.15	7.84
57. ELECTRONIC COMPONENTS & ACCESS.	0.04	0.05	0.06	0.06	0.07	0.07	11.34
58. MISC. ELECTRICAL MACH. & EQ.	0.01	0.01	0.01	0.01	0.01	0.01	9.58
59. MOTOR VEHICLES & EQUIPMENT	0.03	0.04	0.04	0.05	0.06	0.07	17.15
60. AIRCRAFT & PARTS	0.16	0.19	0.20	0.23	0.24	0.25	8.59
61. OTHER TRANSPORTATION EQ.	0.11	0.12	0.12	0.12	0.13	0.13	4.22
62. INSTRUMENTS & SUPPLIES	0.08	0.09	0.10	0.11	0.11	0.12	8.33
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.01	0.01	0.01	0.01	0.01	0.01	8.38
64. MISC. MANUFACTURING	0.01	0.01	0.01	0.01	0.01	0.01	6.05
82. GOVERNMENT INDUSTRY	0.00	0.00	0.00	0.00	0.00	0.00	--
TOTAL, ALL INDUSTRIES	1.23	1.38	1.50	1.64	1.75	1.82	8.27
TOTAL EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	0.26	0.26	0.27	0.27	0.28	0.28	1.90
23. OTHER FURNITURE & FIXTURES	0.68	0.69	0.71	0.73	0.75	0.77	2.34
37. PRIMARY FERROUS METALS	0.10	0.10	0.10	0.10	0.10	0.10	1.15
38. NONFERROUS METALS	0.28	0.29	0.30	0.31	0.31	0.31	2.30
39. METAL CONTAINERS	0.63	0.62	0.62	0.63	0.63	0.64	0.35
40. FAB. STRUCTURAL METAL PRODUCTS	2.06	2.08	2.13	2.21	2.27	2.31	2.26
41. SCREW MACHINE PROD.&STAMPINGS	2.81	2.95	3.05	3.10	3.11	3.12	2.16
42. OTHER FAB. METAL PRODUCTS	0.83	0.86	0.90	0.93	0.95	0.98	3.20

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
99. PUNCH PRESS SETTERS, METAL
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
47. METALWORKING MACH. & EQ.	0.31	0.32	0.34	0.35	0.36	0.37	3.77
49. GENERAL INDUSTRY MACHINERY	0.46	0.47	0.50	0.51	0.52	0.53	2.60
50. MISC. NONELECTRICAL MACH.	0.11	0.12	0.12	0.12	0.12	0.13	2.28
51. OFFICE,COMPUTING & ACCT. MACH.	0.24	0.25	0.26	0.26	0.27	0.27	2.73
52. SERVICE INDUSTRY MACHINES	1.02	1.06	1.12	1.13	1.14	1.14	2.10
53. ELECTRICAL MACHINERY	0.88	0.89	0.93	0.95	0.96	0.97	1.89
55. ELECTRIC LIGHTING & WIRING EQ.	0.49	0.50	0.51	0.52	0.53	0.54	1.72
56. RADIO,TV, & COMMUNICATION EQ.	0.24	0.25	0.25	0.26	0.26	0.26	1.71
57. ELECTRONIC COMPONENTS & ACCESS.	0.19	0.20	0.21	0.21	0.22	0.23	3.62
58. MISC. ELECTRICAL MACH. & EQ.	0.34	0.35	0.37	0.37	0.37	0.38	2.13
59. MOTOR VEHICLES & EQUIPMENT	1.64	1.71	1.77	1.80	1.82	1.83	2.23
60. AIRCRAFT & PARTS	0.33	0.34	0.35	0.36	0.36	0.36	1.99
61. OTHER TRANSPORTATION EQ.	0.38	0.39	0.41	0.42	0.42	0.43	2.80
62. INSTRUMENTS & SUPPLIES	0.68	0.70	0.72	0.75	0.77	0.79	2.86
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.13	0.13	0.14	0.15	0.15	0.15	3.03
64. MISC. MANUFACTURING	0.71	0.72	0.74	0.76	0.77	0.78	2.01
82. GOVERNMENT INDUSTRY	0.01	0.01	0.01	0.01	0.01	0.01	-0.50
TOTAL, ALL INDUSTRIES	17.34	17.83	18.46	18.93	19.20	19.41	2.28

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
100. ROLLING MILL OPERATORS&HELPERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
37. PRIMARY FERROUS METALS	0.40	0.44	0.48	0.51	0.54	0.56	6.94
38. NONFERROUS METALS	0.27	0.31	0.34	0.38	0.41	0.43	9.77
TOTAL, ALL INDUSTRIES	0.67	0.75	0.82	0.89	0.95	0.99	8.11
TOTAL EMPLOYMENT							
37. PRIMARY FERROUS METALS	5.65	5.77	5.90	5.92	5.90	5.83	0.63
38. NONFERROUS METALS	3.16	3.29	3.44	3.56	3.63	3.69	3.15
TOTAL, ALL INDUSTRIES	8.86	9.12	9.39	9.53	9.58	9.58	1.55

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL-
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
101. SHEAR&SLITTER SETTERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	0.02	0.02	0.03	0.03	0.03	0.03	9.69
37. PRIMARY FERROUS METALS	0.04	0.05	0.05	0.05	0.06	0.06	6.94
38. NONFERROUS METALS	0.02	0.02	0.02	0.03	0.03	0.03	9.72
40. FAB. STRUCTURAL METAL PRODUCTS	0.04	0.04	0.04	0.05	0.05	0.05	7.37
41. SCREW MACHINE PROD.&STAMPINGS	0.02	0.02	0.02	0.02	0.02	0.02	7.66
42. OTHER FAB. METAL PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	9.75
51. OFFICE,COMPUTING & ACCT. MACH.	0.01	0.01	0.01	0.01	0.01	0.01	7.31
52. SERVICE INDUSTRY MACHINES	0.01	0.01	0.01	0.01	0.01	0.02	13.38
53. ELECTRICAL MACHINERY	0.01	0.01	0.01	0.01	0.01	0.01	9.04
56. RADIO,TV, & COMMUNICATION EQ.	0.02	0.03	0.03	0.03	0.03	0.03	8.15
57. ELECTRONIC COMPONENTS & ACCESS.	0.01	0.01	0.01	0.01	0.02	0.02	11.24
59. MOTOR VEHICLES & EQUIPMENT	0.01	0.01	0.01	0.01	0.02	0.02	17.15
60. AIRCRAFT & PARTS	0.04	0.04	0.05	0.05	0.06	0.06	8.54
61. OTHER TRANSPORTATION EQ.	0.02	0.02	0.02	0.02	0.02	0.02	2.96
62. INSTRUMENTS & SUPPLIES	0.01	0.01	0.01	0.01	0.01	0.01	8.21
TOTAL, ALL INDUSTRIES	0.29	0.33	0.36	0.39	0.42	0.44	8.44
TOTAL EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	0.03	0.04	0.04	0.04	0.04	0.04	3.48
37. PRIMARY FERROUS METALS	0.59	0.60	0.61	0.62	0.61	0.61	0.62
38. NONFERROUS METALS	0.23	0.24	0.25	0.26	0.26	0.27	3.10
40. FAB. STRUCTURAL METAL PRODUCTS	0.80	0.80	0.82	0.84	0.86	0.87	1.65
41. SCREW MACHINE PROD.&STAMPINGS	0.26	0.28	0.28	0.29	0.29	0.29	2.13
42. OTHER FAB. METAL PRODUCTS	0.19	0.20	0.21	0.21	0.22	0.22	3.04
51. OFFICE,COMPUTING & ACCT. MACH.	0.16	0.17	0.17	0.18	0.18	0.18	2.72
52. SERVICE INDUSTRY MACHINES	0.48	0.50	0.52	0.53	0.53	0.53	2.12
53. ELECTRICAL MACHINERY	0.15	0.15	0.16	0.16	0.17	0.17	1.99
56. RADIO,TV, & COMMUNICATION EQ.	0.06	0.06	0.06	0.06	0.06	0.06	2.00
57. ELECTRONIC COMPONENTS & ACCESS.	0.04	0.04	0.05	0.05	0.05	0.05	3.53
59. MOTOR VEHICLES & EQUIPMENT	0.42	0.44	0.46	0.46	0.47	0.47	2.23
60. AIRCRAFT & PARTS	0.08	0.08	0.08	0.09	0.09	0.09	1.95
61. OTHER TRANSPORTATION EQ.	0.05	0.06	0.06	0.06	0.06	0.06	1.56
62. INSTRUMENTS & SUPPLIES	0.06	0.06	0.07	0.07	0.07	0.07	2.75
TOTAL, ALL INDUSTRIES	4.84	4.96	5.13	5.24	5.31	5.35	2.03

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE

BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
102. SHEET-METAL WORKERS&TINSMITHS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
8. CRUDE PETROLEUM & N. GAS	0.01	0.01	0.01	0.01	0.01	0.01	4.16
11. NEW CONSTRUCTION	3.29	3.70	3.97	4.37	4.69	4.90	8.33
13. ORDNANCE & ACCESSORIES	1.00	1.14	1.25	1.36	1.45	1.51	8.67
23. OTHER FURNITURE & FIXTURES	0.01	0.01	0.01	0.01	0.01	0.02	4.32
24. PAPER & ALLIED PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	6.27
27. CHEMICALS & PRODUCTS	0.03	0.03	0.03	0.04	0.04	0.04	7.87
28. PLASTICS & SYNTHETIC MATLS.	0.01	0.01	0.01	0.01	0.02	0.02	8.71
32. RUBBER & MISC. PLASTICS PROD.	0.01	0.01	0.01	0.01	0.01	0.02	10.41
36. STONE & CLAY PRODUCTS	0.02	0.03	0.03	0.03	0.03	0.03	8.10
37. PRIMARY FERROUS METALS	0.04	0.05	0.05	0.06	0.06	0.06	7.32
38. NONFERROUS METALS	0.03	0.03	0.03	0.04	0.04	0.04	9.78
40. FAB. STRUCTURAL METAL PRODUCTS	0.72	0.81	0.85	0.91	0.95	0.99	6.51
41. SCREW MACHINE PROD.&STAMPINGS	0.05	0.06	0.06	0.07	0.07	0.08	7.68
42. OTHER FAB. METAL PRODUCTS	0.04	0.04	0.05	0.05	0.06	0.06	9.76
43. ENGINES & TURBINES	0.02	0.02	0.03	0.03	0.03	0.03	7.75
45. CONSTR. & MINING MACHINERY	0.02	0.02	0.03	0.03	0.03	0.03	7.24
46. MATERIALS HANDLING MACH. & EQ.	0.04	0.04	0.05	0.05	0.06	0.06	9.12
47. METALWORKING MACH. & EQ.	0.04	0.05	0.06	0.06	0.07	0.07	9.37
48. SPECIAL INDUSTRY MACHINERY	0.03	0.03	0.03	0.04	0.04	0.05	12.06
49. GENERAL INDUSTRY MACHINERY	0.14	0.16	0.17	0.19	0.20	0.21	7.51
50. MISC. NONELECTRICAL MACH.	0.35	0.38	0.42	0.46	0.49	0.50	7.53
51. OFFICE,COMPUTING & ACCT. MACH.	0.03	0.03	0.03	0.04	0.04	0.04	7.32
52. SERVICE INDUSTRY MACHINES	0.08	0.09	0.10	0.11	0.13	0.14	13.37
53. ELECTRICAL MACHINERY	0.11	0.12	0.13	0.14	0.16	0.16	8.84
55. ELECTRIC LIGHTING & WIRING EQ.	0.04	0.05	0.05	0.06	0.06	0.06	8.26
56. RADIO,TV, & COMMUNICATION EQ.	0.63	0.72	0.79	0.86	0.91	0.93	8.20
57. ELECTRONIC COMPONENTS & ACCESS.	0.27	0.32	0.36	0.40	0.43	0.45	11.37
58. MISC. ELECTRICAL MACH. & EQ.	0.01	0.01	0.01	0.02	0.02	0.02	9.58
59. MOTOR VEHICLES & EQUIPMENT	0.09	0.11	0.12	0.15	0.17	0.20	17.14
60. AIRCRAFT & PARTS	3.04	3.44	3.79	4.18	4.47	4.59	8.59
61. OTHER TRANSPORTATION EQ.	1.08	1.14	1.17	1.20	1.24	1.28	3.43
62. INSTRUMENTS & SUPPLIES	0.14	0.16	0.18	0.19	0.21	0.21	7.99
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.01	0.01	0.01	0.02	0.02	0.02	8.56
64. MISC. MANUFACTURING	0.02	0.03	0.03	0.03	0.03	0.03	3.35
65. TRANSPORTATION & WAREHOUSING	0.17	0.18	0.19	0.19	0.20	0.20	2.71
69. WHOLESALE & RETAIL TRADE	0.03	0.03	0.04	0.04	0.04	0.04	9.16
72. PERSONAL SERVICES EXC. AUTO.	0.01	0.02	0.02	0.02	0.02	0.02	10.97

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
102. SHEET-METAL WORKERS&TINSMITHS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
73. BUSINESS SERVICES	0.01	0.01	0.01	0.02	0.02	0.02	7.80
77. MISC. SERVICES	0.01	0.01	0.01	0.01	0.01	0.01	2.50
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.69	0.71	0.73	0.77	0.79	0.80	2.99
82. GOVERNMENT INDUSTRY	10.45	10.24	10.42	10.69	10.85	10.91	0.86
TOTAL, ALL INDUSTRIES	22.88	24.11	25.41	27.01	28.22	28.93	4.81
TOTAL EMPLOYMENT							
8. CRUDE PETROLEUM & N. GAS	0.16	0.16	0.16	0.16	0.15	0.15	-0.62
11. NEW CONSTRUCTION	87.46	89.01	90.54	93.14	95.14	96.21	1.93
13. ORDNANCE & ACCESSORIES	1.65	1.70	1.75	1.80	1.84	1.87	2.52
23. OTHER FURNITURE & FIXTURES	0.78	0.78	0.80	0.83	0.84	0.86	1.90
24. PAPER & ALLIED PRODUCTS	0.41	0.42	0.43	0.43	0.42	0.42	0.46
27. CHEMICALS & PRODUCTS	0.59	0.60	0.61	0.62	0.62	0.63	1.34
28. PLASTICS & SYNTHETIC MATLS.	0.44	0.46	0.48	0.49	0.49	0.50	2.32
32. RUBBER & MISC. PLASTICS PROD.	0.35	0.36	0.38	0.39	0.40	0.41	2.98
36. STONE & CLAY PRODUCTS	0.70	0.71	0.72	0.74	0.74	0.73	0.88
37. PRIMARY FERROUS METALS	0.62	0.64	0.66	0.66	0.66	0.65	0.98
38. NONFERROUS METALS	0.32	0.34	0.35	0.36	0.37	0.38	3.16
40. FAB. STRUCTURAL METAL PRODUCTS	16.23	16.09	16.31	16.68	16.87	16.92	0.84
41. SCREW MACHINE PROD.&STAMPINGS	0.87	0.91	0.94	0.96	0.96	0.97	2.15
42. OTHER FAB. METAL PRODUCTS	0.84	0.86	0.90	0.93	0.95	0.97	3.06
43. ENGINES & TURBINES	0.25	0.26	0.27	0.27	0.27	0.28	1.81
45. CONSTR. & MINING MACHINERY	1.85	1.95	2.05	2.13	2.18	2.21	3.64
46. MATERIALS HANDLING MACH. & EQ.	0.66	0.68	0.72	0.75	0.77	0.79	3.62
47. METALWORKING MACH. & EQ.	0.85	0.89	0.94	0.98	1.00	1.02	3.77
48. SPECIAL INDUSTRY MACHINERY	3.56	3.64	3.82	3.99	4.09	4.18	3.22
49. GENERAL INDUSTRY MACHINERY	3.25	3.34	3.49	3.59	3.65	3.70	2.62
50. MISC. NONELECTRICAL MACH.	3.04	3.12	3.26	3.33	3.36	3.40	2.23
51. OFFICE,COMPUTING & ACCT. MACH.	0.74	0.77	0.81	0.82	0.83	0.85	2.73
52. SERVICE INDUSTRY MACHINES	4.24	4.41	4.62	4.69	4.70	4.71	2.10
53. ELECTRICAL MACHINERY	2.13	2.16	2.25	2.30	2.32	2.33	1.81
55. ELECTRIC LIGHTING & WIRING EQ.	0.89	0.90	0.92	0.94	0.96	0.97	1.71
56. RADIO,TV, & COMMUNICATION EQ.	1.48	1.52	1.57	1.60	1.61	1.64	2.04
57. ELECTRONIC COMPONENTS & ACCESS.	1.21	1.26	1.33	1.38	1.42	1.45	3.65
58. MISC. ELECTRICAL MACH. & EQ.	0.43	0.45	0.47	0.47	0.48	0.48	2.13
59. MOTOR VEHICLES & EQUIPMENT	4.73	4.94	5.11	5.19	5.25	5.28	2.23
60. AIRCRAFT & PARTS	6.08	6.33	6.50	6.70	6.72	6.71	2.00
61. OTHER TRANSPORTATION EQ.	3.72	3.83	3.97	4.06	4.07	4.11	2.02

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
102. SHEET-METAL WORKERS&TINSMITHS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
62. INSTRUMENTS & SUPPLIES	1.24	1.26	1.31	1.36	1.39	1.41	2.54
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.27	0.28	0.29	0.30	0.31	0.32	3.20
64. MISC. MANUFACTURING	2.19	2.17	2.19	2.19	2.17	2.13	-0.58
65. TRANSPORTATION & WAREHOUSING	4.10	4.12	4.14	4.17	4.13	4.06	-0.17
69. WHOLESALE & RETAIL TRADE	4.70	4.83	4.96	5.06	5.14	5.22	2.14
72. PERSONAL SERVICES EXC. AUTO.	0.73	0.76	0.80	0.83	0.87	0.90	4.28
73. BUSINESS SERVICES	0.25	0.25	0.26	0.27	0.27	0.28	2.45
77. MISC. SERVICES	1.28	1.28	1.28	1.29	1.30	1.32	0.58
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	5.66	5.75	5.88	6.03	6.13	6.18	1.79
82. GOVERNMENT INDUSTRY	21.44	21.38	21.58	21.96	22.33	22.63	1.08
TOTAL, ALL INDUSTRIES	195.63	198.88	203.18	208.31	211.72	213.79	1.79

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
103. TOOL&DIE MAKERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	1.14	1.28	1.39	1.50	1.57	1.63	7.38
19. MISC. FABRICATED TEXTILE PROD.	0.01	0.01	0.01	0.01	0.01	0.01	4.69
23. OTHER FURNITURE & FIXTURES	0.01	0.01	0.01	0.02	0.02	0.02	4.55
24. PAPER & ALLIED PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	7.09
25. PAPERBOARD CONTAINERS & BOXES	0.03	0.03	0.04	0.04	0.04	0.05	8.78
27. CHEMICALS & PRODUCTS	0.02	0.02	0.02	0.02	0.02	0.02	7.96
28. PLASTICS & SYNTHETIC MATLS.	0.02	0.02	0.02	0.02	0.02	0.02	8.69
30. PAINTS & ALLIED PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	8.24
32. RUBBER & MISC. PLASTICS PROD.	0.15	0.16	0.18	0.19	0.21	0.22	7.95
36. STONE & CLAY PRODUCTS	0.02	0.03	0.03	0.03	0.03	0.03	7.55
37. PRIMARY FERROUS METALS	0.07	0.08	0.08	0.09	0.09	0.09	6.04
38. NONFERROUS METALS	0.28	0.32	0.34	0.37	0.40	0.41	8.38
39. METAL CONTAINERS	0.01	0.01	0.01	0.02	0.02	0.02	5.56
40. FAB. STRUCTURAL METAL PRODUCTS	0.24	0.27	0.29	0.30	0.32	0.33	6.34
41. SCREW MACHINE PROD.&STAMPINGS	0.87	0.95	1.01	1.09	1.13	1.16	6.03
42. OTHER FAB. METAL PRODUCTS	0.18	0.21	0.23	0.26	0.28	0.29	9.97
43. ENGINES & TURBINES	0.18	0.21	0.23	0.24	0.26	0.27	7.72
45. CONSTR. & MINING MACHINERY	0.01	0.01	0.02	0.02	0.02	0.02	5.29
46. MATERIALS HANDLING MACH. & EQ.	0.02	0.03	0.03	0.03	0.03	0.03	7.13
47. METALWORKING MACH. & EQ.	1.90	2.17	2.38	2.61	2.79	2.90	8.78
48. SPECIAL INDUSTRY MACHINERY	0.01	0.02	0.02	0.02	0.02	0.02	12.06
49. GENERAL INDUSTRY MACHINERY	0.10	0.11	0.12	0.13	0.13	0.14	6.18
50. MISC. NONELECTRICAL MACH.	0.53	0.57	0.62	0.67	0.71	0.72	6.58
51. OFFICE,COMPUTING & ACCT. MACH.	0.06	0.07	0.07	0.07	0.08	0.08	4.98
52. SERVICE INDUSTRY MACHINES	0.02	0.02	0.03	0.03	0.03	0.04	13.37
53. ELECTRICAL MACHINERY	0.15	0.17	0.19	0.20	0.22	0.22	7.79
55. ELECTRIC LIGHTING & WIRING EQ.	0.12	0.13	0.14	0.15	0.16	0.16	5.21
56. RADIO,TV, & COMMUNICATION EQ.	1.49	1.71	1.88	2.03	2.14	2.19	8.04
57. ELECTRONIC COMPONENTS & ACCESS.	0.62	0.73	0.81	0.90	0.97	1.01	10.27
58. MISC. ELECTRICAL MACH. & EQ.	0.06	0.07	0.07	0.08	0.09	0.09	9.57
59. MOTOR VEHICLES & EQUIPMENT	0.26	0.30	0.35	0.41	0.48	0.56	17.12
60. AIRCRAFT & PARTS	2.52	2.85	3.13	3.45	3.68	3.78	8.42
61. OTHER TRANSPORTATION EQ.	0.23	0.24	0.25	0.25	0.26	0.27	3.78
62. INSTRUMENTS & SUPPLIES	0.42	0.48	0.52	0.57	0.60	0.62	7.95
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.06	0.06	0.07	0.07	0.08	0.08	8.52
64. MISC. MANUFACTURING	0.03	0.03	0.03	0.04	0.04	0.04	4.84
65. TRANSPORTATION & WAREHOUSING	0.01	0.01	0.01	0.01	0.01	0.01	3.03

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
103. TOOL&DIE MAKERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
69. WHOLESALE & RETAIL TRADE	0.01	0.01	0.01	0.01	0.01	0.01	9.38
72. PERSONAL SERVICES EXC. AUTO.	0.01	0.01	0.01	0.01	0.01	0.01	12.23
73. BUSINESS SERVICES	0.01	0.01	0.01	0.01	0.01	0.01	7.58
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.31	0.34	0.36	0.39	0.40	0.41	5.37
82. GOVERNMENT INDUSTRY	0.92	0.90	0.92	0.94	0.95	0.96	0.86
TOTAL, ALL INDUSTRIES	13.15	14.71	15.96	17.36	18.42	19.03	7.66

TOTAL EMPLOYMENT

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
13. ORDNANCE & ACCESSORIES	1.89	1.92	1.95	1.98	2.00	2.01	1.30
19. MISC. FABRICATED TEXTILE PROD.	0.20	0.20	0.21	0.21	0.21	0.22	1.86
23. OTHER FURNITURE & FIXTURES	0.86	0.87	0.90	0.92	0.94	0.96	2.13
24. PAPER & ALLIED PRODUCTS	0.38	0.39	0.40	0.40	0.40	0.40	1.23
25. PAPERBOARD CONTAINERS & BOXES	1.38	1.42	1.45	1.48	1.50	1.51	1.72
27. CHEMICALS & PRODUCTS	0.32	0.33	0.34	0.34	0.34	0.35	1.42
28. PLASTICS & SYNTHETIC MATLS.	0.63	0.65	0.67	0.69	0.70	0.70	2.30
30. PAINTS & ALLIED PRODUCTS	0.11	0.11	0.12	0.12	0.13	0.13	3.02
32. RUBBER & MISC. PLASTICS PROD.	5.42	5.48	5.58	5.64	5.67	5.61	0.68
36. STONE & CLAY PRODUCTS	0.69	0.70	0.71	0.72	0.72	0.70	0.36
37. PRIMARY FERROUS METALS	0.98	0.99	1.01	1.00	0.99	0.97	-0.23
38. NONFERROUS METALS	3.28	3.37	3.48	3.55	3.57	3.59	1.84
39. METAL CONTAINERS	0.88	0.86	0.85	0.86	0.86	0.86	-0.63
40. FAB. STRUCTURAL METAL PRODUCTS	5.47	5.41	5.48	5.59	5.65	5.66	0.68
41. SCREW MACHINE PROD.&STAMPINGS	14.16	14.63	14.86	14.88	14.74	14.58	0.59
42. OTHER FAB. METAL PRODUCTS	3.98	4.11	4.30	4.44	4.55	4.67	3.25
43. ENGINES & TURBINES	2.22	2.29	2.37	2.40	2.41	2.42	1.79
45. CONSTR. & MINING MACHINERY	1.11	1.15	1.19	1.21	1.22	1.21	1.76
46. MATERIALS HANDLING MACH. & EQ.	0.40	0.40	0.42	0.43	0.43	0.43	1.74
47. METALWORKING MACH. & EQ.	36.99	38.28	40.34	41.75	42.74	43.32	3.21
48. SPECIAL INDUSTRY MACHINERY	1.82	1.86	1.95	2.04	2.09	2.13	3.22
49. GENERAL INDUSTRY MACHINERY	2.32	2.35	2.43	2.46	2.47	2.48	1.35
50. MISC. NONELECTRICAL MACH.	4.59	4.67	4.82	4.89	4.89	4.91	1.32
51. OFFICE,COMPUTING & ACCT. MACH.	1.60	1.62	1.65	1.64	1.63	1.64	0.48
52. SERVICE INDUSTRY MACHINES	1.15	1.20	1.26	1.28	1.28	1.28	2.10
53. ELECTRICAL MACHINERY	3.08	3.09	3.19	3.22	3.22	3.20	0.82
55. ELECTRIC LIGHTING & WIRING EQ.	2.57	2.51	2.50	2.49	2.46	2.43	-1.16
56. RADIO,TV, & COMMUNICATION EQ.	3.52	3.60	3.71	3.77	3.80	3.86	1.90
57. ELECTRONIC COMPONENTS & ACCESS.	2.82	2.91	3.02	3.12	3.17	3.21	2.63
58. MISC. ELECTRICAL MACH. & EQ.	2.12	2.20	2.28	2.31	2.34	2.36	2.12

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
103. TOOL&DIE MAKERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
59. MOTOR VEHICLES & EQUIPMENT	13.19	13.79	14.25	14.48	14.64	14.72	2.21
60. AIRCRAFT & PARTS	5.05	5.24	5.38	5.54	5.54	5.53	1.84
61. OTHER TRANSPORTATION EQ.	0.78	0.81	0.84	0.86	0.87	0.88	2.36
62. INSTRUMENTS & SUPPLIES	3.64	3.69	3.83	3.96	4.06	4.12	2.50
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	1.27	1.29	1.35	1.41	1.45	1.49	3.16
64. MISC. MANUFACTURING	2.68	2.69	2.75	2.80	2.81	2.80	0.85
65. TRANSPORTATION & WAREHOUSING	0.16	0.16	0.16	0.16	0.16	0.16	0.14
69. WHOLESALE & RETAIL TRADE	1.25	1.28	1.32	1.35	1.38	1.40	2.35
72. PERSONAL SERVICES EXC. AUTO.	0.37	0.39	0.42	0.44	0.46	0.49	5.47
73. BUSINESS SERVICES	0.19	0.19	0.20	0.20	0.21	0.21	2.24
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	3.04	3.12	3.23	3.30	3.33	3.35	1.96
82. GOVERNMENT INDUSTRY	2.20	2.19	2.21	2.24	2.27	2.30	0.88
TOTAL, ALL INDUSTRIES	146.43	150.22	155.28	158.63	160.41	161.39	1.96

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
104. METALWORKING CRAFT WORKERS NEC
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	0.07	0.08	0.09	0.09	0.09	0.10	6.49
37. PRIMARY FERROUS METALS	0.30	0.34	0.36	0.39	0.42	0.44	7.53
38. NONFERROUS METALS	0.08	0.09	0.09	0.10	0.11	0.12	9.27
40. FAB. STRUCTURAL METAL PRODUCTS	0.04	0.05	0.05	0.06	0.06	0.07	8.29
41. SCREW MACHINE PROD.&STAMPINGS	0.07	0.08	0.09	0.10	0.10	0.11	7.69
42. OTHER FAB. METAL PRODUCTS	0.03	0.03	0.04	0.04	0.04	0.05	9.94
47. METALWORKING MACH. & EQ.	0.01	0.01	0.01	0.01	0.01	0.01	9.37
53. ELECTRICAL MACHINERY	0.01	0.01	0.01	0.01	0.02	0.02	8.95
55. ELECTRIC LIGHTING & WIRING EQ.	0.01	0.01	0.01	0.02	0.02	0.02	8.27
56. RADIO,TV, & COMMUNICATION EQ.	0.05	0.05	0.06	0.06	0.07	0.07	8.25
57. ELECTRONIC COMPONENTS & ACCESS.	0.01	0.01	0.01	0.02	0.02	0.02	11.38
60. AIRCRAFT & PARTS	0.09	0.10	0.11	0.12	0.13	0.13	8.52
82. GOVERNMENT INDUSTRY	1.71	1.68	1.71	1.75	1.78	1.78	0.82
TOTAL, ALL INDUSTRIES	2.51	2.58	2.68	2.81	2.91	2.96	3.34
TOTAL EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	0.12	0.12	0.12	0.12	0.12	0.12	0.47
37. PRIMARY FERROUS METALS	4.26	4.38	4.50	4.54	4.55	4.52	1.18
38. NONFERROUS METALS	0.89	0.92	0.96	0.99	1.00	1.02	2.68
40. FAB. STRUCTURAL METAL PRODUCTS	0.98	0.99	1.02	1.06	1.09	1.11	2.52
41. SCREW MACHINE PROD.&STAMPINGS	1.21	1.27	1.31	1.33	1.34	1.35	2.16
42. OTHER FAB. METAL PRODUCTS	0.63	0.65	0.68	0.70	0.72	0.74	3.23
47. METALWORKING MACH. & EQ.	0.16	0.17	0.18	0.18	0.19	0.19	3.77
53. ELECTRICAL MACHINERY	0.21	0.21	0.22	0.23	0.23	0.23	1.91
55. ELECTRIC LIGHTING & WIRING EQ.	0.24	0.24	0.25	0.25	0.26	0.26	1.72
56. RADIO,TV, & COMMUNICATION EQ.	0.11	0.11	0.12	0.12	0.12	0.12	2.09
57. ELECTRONIC COMPONENTS & ACCESS.	0.05	0.05	0.05	0.05	0.06	0.06	3.66
60. AIRCRAFT & PARTS	0.18	0.18	0.19	0.19	0.19	0.19	1.93
82. GOVERNMENT INDUSTRY	4.33	4.36	4.45	4.59	4.72	4.80	2.07
TOTAL, ALL INDUSTRIES	14.31	14.64	15.06	15.41	15.65	15.78	1.97

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
105. PRINTING TRADES CRAFT WORKERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	0.06	0.07	0.08	0.08	0.08	0.09	6.43
16. FABRIC,YARN & THREAD MILLS	0.01	0.02	0.02	0.02	0.02	0.02	5.36
19. MISC. FABRICATED TEXTILE PROD.	0.02	0.02	0.02	0.02	0.02	0.03	4.67
24. PAPER & ALLIED PRODUCTS	0.19	0.21	0.22	0.24	0.25	0.26	6.89
25. PAPERBOARD CONTAINERS & BOXES	0.11	0.12	0.13	0.14	0.16	0.16	8.78
26. PRINTING & PUBLISHING	4.74	5.10	5.42	5.79	6.04	6.17	5.40
27. CHEMICALS & PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	7.45
30. PAINTS & ALLIED PRODUCTS	0.01	0.01	0.02	0.02	0.02	0.02	8.23
32. RUBBER & MISC. PLASTICS PROD.	0.05	0.06	0.06	0.07	0.08	0.08	10.28
35. GLASS & GLASS PRODUCTS	0.01	0.02	0.02	0.02	0.02	0.02	12.70
37. PRIMARY FERROUS METALS	0.02	0.02	0.02	0.02	0.03	0.03	7.53
39. METAL CONTAINERS	0.02	0.02	0.02	0.02	0.03	0.03	6.61
40. FAB. STRUCTURAL METAL PRODUCTS	0.04	0.04	0.05	0.05	0.05	0.06	8.09
41. SCREW MACHINE PROD.&STAMPINGS	0.03	0.03	0.03	0.04	0.04	0.04	7.68
42. OTHER FAB. METAL PRODUCTS	0.08	0.09	0.09	0.10	0.11	0.12	9.20
47. METALWORKING MACH. & EQ.	0.02	0.03	0.03	0.03	0.03	0.04	9.36
49. GENERAL INDUSTRY MACHINERY	0.01	0.01	0.01	0.01	0.01	0.01	7.50
50. MISC. NONELECTRICAL MACH.	0.01	0.01	0.01	0.02	0.02	0.02	7.48
51. OFFICE,COMPUTING & ACCT. MACH.	0.04	0.04	0.05	0.05	0.05	0.05	7.32
53. ELECTRICAL MACHINERY	0.01	0.02	0.02	0.02	0.02	0.02	8.85
55. ELECTRIC LIGHTING & WIRING EQ.	0.01	0.01	0.01	0.01	0.01	0.01	8.29
56. RADIO,TV, & COMMUNICATION EQ.	0.53	0.61	0.67	0.72	0.76	0.78	7.80
57. ELECTRONIC COMPONENTS & ACCESS.	0.74	0.88	0.99	1.11	1.21	1.27	11.37
60. AIRCRAFT & PARTS	0.16	0.18	0.20	0.22	0.23	0.24	8.58
61. OTHER TRANSPORTATION EQ.	0.04	0.04	0.05	0.05	0.05	0.05	3.11
62. INSTRUMENTS & SUPPLIES	0.05	0.05	0.06	0.06	0.07	0.07	8.21
64. MISC. MANUFACTURING	0.04	0.04	0.04	0.05	0.05	0.05	3.93
69. WHOLESALE & RETAIL TRADE	0.02	0.02	0.02	0.02	0.02	0.02	8.40
70. FINANCE & INSURANCE	0.03	0.03	0.03	0.04	0.04	0.04	9.00
73. BUSINESS SERVICES	0.34	0.37	0.40	0.43	0.45	0.46	6.44
77. MISC. SERVICES	0.06	0.06	0.06	0.06	0.06	0.06	1.90
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.59	0.61	0.64	0.67	0.69	0.70	3.44
82. GOVERNMENT INDUSTRY	4.38	4.27	4.32	4.40	4.44	4.44	0.27
TOTAL, ALL INDUSTRIES	12.55	13.20	13.90	14.73	15.30	15.58	4.42

TOTAL EMPLOYMENT

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
105. PRINTING TRADES CRAFT WORKERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
13. ORDNANCE & ACCESSORIES	0.11	0.11	0.11	0.11	0.11	0.11	0.41
16. FABRIC,YARN & THREAD MILLS	1.17	1.21	1.24	1.27	1.28	1.29	1.96
19. MISC. FABRICATED TEXTILE PROD.	0.69	0.70	0.72	0.74	0.75	0.75	1.84
24. PAPER & ALLIED PRODUCTS	10.10	10.42	10.55	10.61	10.63	10.63	1.04
25. PAPERBOARD CONTAINERS & BOXES	4.87	5.00	5.12	5.21	5.27	5.30	1.71
26. PRINTING & PUBLISHING	301.78	300.77	300.92	301.04	300.16	299.13	-0.18
27. CHEMICALS & PRODUCTS	0.21	0.22	0.22	0.22	0.22	0.22	0.95
30. PAINTS & ALLIED PRODUCTS	0.24	0.25	0.26	0.27	0.28	0.28	3.01
32. RUBBER & MISC. PLASTICS PROD.	1.85	1.91	1.99	2.06	2.11	2.13	2.85
35. GLASS & GLASS PRODUCTS	0.62	0.65	0.69	0.71	0.73	0.74	3.72
37. PRIMARY FERROUS METALS	0.27	0.27	0.28	0.29	0.29	0.28	1.18
39. METAL CONTAINERS	1.34	1.32	1.33	1.35	1.36	1.37	0.36
40. FAB. STRUCTURAL METAL PRODUCTS	0.84	0.85	0.87	0.91	0.93	0.94	2.33
41. SCREW MACHINE PROD.&STAMPINGS	0.47	0.50	0.51	0.52	0.52	0.52	2.15
42. OTHER FAB. METAL PRODUCTS	1.65	1.70	1.76	1.81	1.84	1.87	2.53
47. METALWORKING MACH. & EQ.	0.45	0.47	0.49	0.51	0.53	0.54	3.77
49. GENERAL INDUSTRY MACHINERY	0.20	0.21	0.22	0.22	0.23	0.23	2.61
50. MISC. NONELECTRICAL MACH.	0.10	0.11	0.11	0.11	0.12	0.12	2.17
51. OFFICE,COMPUTING & ACCT. MACH.	0.97	1.01	1.05	1.07	1.08	1.11	2.72
53. ELECTRICAL MACHINERY	0.28	0.28	0.30	0.30	0.31	0.31	1.82
55. ELECTRIC LIGHTING & WIRING EQ.	0.14	0.14	0.14	0.14	0.15	0.15	1.74
56. RADIO,TV, & COMMUNICATION EQ.	1.26	1.29	1.32	1.34	1.35	1.37	1.67
57. ELECTRONIC COMPONENTS & ACCESS.	3.37	3.52	3.69	3.84	3.95	4.04	3.65
60. AIRCRAFT & PARTS	0.32	0.33	0.34	0.35	0.35	0.35	1.98
61. OTHER TRANSPORTATION EQ.	0.15	0.15	0.15	0.16	0.16	0.16	1.70
62. INSTRUMENTS & SUPPLIES	0.40	0.41	0.43	0.44	0.46	0.46	2.75
64. MISC. MANUFACTURING	3.63	3.61	3.65	3.68	3.67	3.62	-0.03
69. WHOLESALE & RETAIL TRADE	2.65	2.71	2.76	2.80	2.82	2.85	1.43
70. FINANCE & INSURANCE	3.00	3.04	3.09	3.16	3.24	3.31	1.94
73. BUSINESS SERVICES	6.94	7.01	7.10	7.23	7.31	7.35	1.15
77. MISC. SERVICES	8.68	8.61	8.56	8.57	8.61	8.68	-0.01
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	15.25	15.25	15.30	15.36	15.35	15.34	0.12
82. GOVERNMENT INDUSTRY	15.97	15.82	15.86	16.02	16.18	16.30	0.40
TOTAL, ALL INDUSTRIES	396.02	396.00	397.47	398.89	398.83	398.39	0.12

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
106. OTHER CRAFT&RELATED WORKERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
1. LIVESTOCK & PRODUCTS	0.06	0.06	0.06	0.06	0.06	0.07	2.60
2. OTHER AGRICULTURAL PRODUCTS	0.10	0.10	0.10	0.11	0.11	0.12	2.57
3. FORESTRY & FISHERY PRODUCTS	0.03	0.03	0.04	0.04	0.04	0.04	5.83
4. AGR.,FORESTRY,&FISHERY SERV.	0.13	0.15	0.15	0.17	0.18	0.19	6.86
5. IRON ORE MINING	0.31	0.36	0.39	0.42	0.44	0.45	7.72
6. NONFERROUS METAL MINING	0.53	0.62	0.69	0.77	0.84	0.90	11.07
7. COAL MINING	1.56	1.78	1.97	2.16	2.36	2.48	9.69
8. CRUDE PETROLEUM & N. GAS	2.38	2.54	2.62	2.77	2.91	2.93	4.27
9. STONE&CLAY MINING & QUARRYING	0.54	0.60	0.66	0.74	0.81	0.86	9.94
10. CHEM&FERTILIZER MIN. MINING	0.06	0.07	0.07	0.08	0.08	0.09	7.91
11. NEW CONSTRUCTION	11.69	13.19	14.16	15.61	16.77	17.56	8.48
13. ORDNANCE & ACCESSORIES	11.34	12.82	13.97	15.09	15.91	16.50	7.79
14. FOOD & KINDRED PRODUCTS	0.69	0.75	0.78	0.83	0.86	0.88	5.19
15. TOBACCO MANUFACTURES	0.01	0.01	0.01	0.01	0.01	0.01	6.26
16. FABRIC,YARN & THREAD MILLS	0.39	0.42	0.44	0.46	0.48	0.50	4.96
17. MISC. TEXTILE GOODS	0.14	0.15	0.16	0.17	0.19	0.19	7.32
18. APPAREL	0.29	0.31	0.32	0.35	0.37	0.39	6.42
19. MISC. FABRICATED TEXTILE PROD.	0.30	0.31	0.33	0.35	0.36	0.37	4.32
20. LUMBER & WOOD PRODUCTS	1.39	1.57	1.68	1.82	1.97	2.08	8.34
21. WOOD CONTAINERS	0.13	0.15	0.17	0.18	0.20	0.21	9.82
22. HOUSEHOLD FURNITURE	0.36	0.38	0.41	0.42	0.43	0.43	3.70
23. OTHER FURNITURE & FIXTURES	0.36	0.37	0.39	0.41	0.43	0.45	4.74
24. PAPER & ALLIED PRODUCTS	0.89	0.97	1.05	1.12	1.18	1.22	6.50
25. PAPERBOARD CONTAINERS & BOXES	0.34	0.38	0.42	0.46	0.50	0.52	8.81
26. PRINTING & PUBLISHING	0.56	0.61	0.65	0.71	0.75	0.77	6.63
27. CHEMICALS & PRODUCTS	1.72	1.90	2.04	2.21	2.37	2.48	7.61
28. PLASTICS & SYNTHETIC MATLS.	0.48	0.53	0.59	0.65	0.69	0.72	8.66
29. DRUGS,CLEANING & TOILET PREP.	0.06	0.06	0.06	0.07	0.07	0.07	4.17
30. PAINTS & ALLIED PRODUCTS	0.13	0.14	0.16	0.17	0.19	0.19	8.26
31. PET REFINING & REL. PROD.	0.75	0.79	0.83	0.89	0.94	0.96	5.22
32. RUBBER & MISC. PLASTICS PROD.	1.75	1.98	2.21	2.48	2.72	2.87	10.39
34. FOOTWEAR & OTHER LEATHER PROD.	0.03	0.03	0.03	0.03	0.03	0.03	5.61
35. GLASS & GLASS PRODUCTS	0.41	0.46	0.50	0.55	0.59	0.63	9.13
36. STONE & CLAY PRODUCTS	1.17	1.33	1.43	1.58	1.70	1.78	8.85
37. PRIMARY FERROUS METALS	6.33	7.02	7.56	8.22	8.73	9.07	7.45
38. NONFERROUS METALS	3.06	3.51	3.86	4.26	4.60	4.82	9.50
39. METAL CONTAINERS	0.14	0.15	0.16	0.17	0.18	0.19	6.61

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
106. OTHER CRAFT&RELATED WORKERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
40. FAB. STRUCTURAL METAL PRODUCTS	2.71	3.04	3.25	3.49	3.70	3.90	7.57
41. SCREW MACHINE PROD.&STAMPINGS	2.07	2.34	2.54	2.80	2.99	3.14	8.69
42. OTHER FAB. METAL PRODUCTS	1.25	1.43	1.56	1.73	1.87	1.97	9.57
43. ENGINES & TURBINES	0.87	0.99	1.08	1.15	1.21	1.26	7.65
44. FARM & GARDEN MACHINERY	0.03	0.04	0.04	0.04	0.05	0.05	8.31
45. CONSTR. & MINING MACHINERY	0.21	0.23	0.25	0.27	0.29	0.30	7.27
46. MATERIALS HANDLING MACH. & EQ.	0.36	0.41	0.45	0.49	0.53	0.55	9.15
47. METALWORKING MACH. & EQ.	0.95	1.09	1.20	1.33	1.42	1.48	9.21
48. SPECIAL INDUSTRY MACHINERY	0.11	0.13	0.14	0.16	0.18	0.19	12.06
49. GENERAL INDUSTRY MACHINERY	1.01	1.14	1.23	1.32	1.41	1.47	7.64
50. MISC. NONELECTRICAL MACH.	1.34	1.46	1.60	1.76	1.87	1.93	7.54
51. OFFICE,COMPUTING & ACCT. MACH.	0.87	1.00	1.10	1.18	1.23	1.27	7.75
52. SERVICE INDUSTRY MACHINES	0.22	0.26	0.29	0.33	0.37	0.42	13.36
53. ELECTRICAL MACHINERY	1.33	1.52	1.67	1.84	1.98	2.08	9.35
54. HOUSEHOLD APPLIANCES	0.03	0.03	0.03	0.03	0.04	0.04	9.25
55. ELECTRIC LIGHTING & WIRING EQ.	0.70	0.80	0.86	0.95	1.02	1.07	8.75
56. RADIO,TV, & COMMUNICATION EQ.	20.77	23.71	25.88	27.89	29.16	29.63	7.37
57. ELECTRONIC COMPONENTS & ACCESS.	9.08	10.81	12.17	13.61	14.85	15.56	11.37
58. MISC. ELECTRICAL MACH. & EQ.	0.40	0.46	0.50	0.56	0.60	0.63	9.57
59. MOTOR VEHICLES & EQUIPMENT	1.75	2.09	2.38	2.83	3.31	3.87	17.17
60. AIRCRAFT & PARTS	26.96	30.31	33.18	36.38	38.67	39.45	7.91
61. OTHER TRANSPORTATION EQ.	11.03	11.63	12.01	12.25	12.64	13.03	3.39
62. INSTRUMENTS & SUPPLIES	4.37	4.93	5.38	5.90	6.29	6.51	8.33
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	1.22	1.35	1.47	1.63	1.77	1.87	8.92
64. MISC. MANUFACTURING	0.34	0.37	0.39	0.42	0.44	0.45	5.65
65. TRANSPORTATION & WAREHOUSING	6.40	6.71	6.94	7.30	7.53	7.60	3.51
66. COMMUNICATION EXC. RADIO & TV	1.51	1.60	1.70	1.83	1.93	1.97	5.40
67. RADIO & TV BROADCASTING	0.01	0.01	0.01	0.01	0.01	0.01	8.17
68. UTILITIES	2.35	2.57	2.75	2.95	3.09	3.13	5.92
69. WHOLESALE & RETAIL TRADE	2.38	2.69	2.97	3.29	3.56	3.75	9.49
70. FINANCE & INSURANCE	0.04	0.04	0.05	0.05	0.06	0.06	9.52
71. REAL ESTATE & RENTAL	0.10	0.11	0.12	0.13	0.14	0.14	7.98
72. PERSONAL SERVICES EXC. AUTO.	1.15	1.28	1.38	1.51	1.60	1.68	7.91
73. BUSINESS SERVICES	1.99	2.22	2.42	2.64	2.82	2.91	7.85
74. EATING & DRINKING PLACES	0.02	0.02	0.03	0.03	0.03	0.03	9.74
75. AUTOMOBILE REPAIR & SERVICE	0.27	0.30	0.32	0.35	0.37	0.38	7.62
76. AMUSEMENTS	0.19	0.21	0.23	0.24	0.26	0.27	6.74
77. MISC. SERVICES	0.87	0.90	0.95	1.01	1.06	1.10	4.66
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	8.59	9.17	9.68	10.23	10.56	10.72	4.52

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
106. OTHER CRAFT&RELATED WORKERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
82. GOVERNMENT INDUSTRY	16.09	15.80	16.13	16.60	16.90	17.04	1.15
TOTAL, ALL INDUSTRIES	182.55	201.81	217.45	235.10	248.86	256.97	7.08
TOTAL EMPLOYMENT							
1. LIVESTOCK & PRODUCTS	9.43	9.52	9.37	9.20	9.14	9.06	-0.80
2. OTHER AGRICULTURAL PRODUCTS	68.04	68.17	68.36	68.00	67.72	67.49	-0.16
3. FORESTRY & FISHERY PRODUCTS	1.28	1.34	1.43	1.49	1.49	1.47	2.87
4. AGR.,FORESTRY,&FISHERY SERV.	7.30	7.50	7.58	7.75	7.84	7.97	1.76
5. IRON ORE MINING	6.12	6.56	7.01	6.92	6.78	6.62	1.57
6. NONFERROUS METAL MINING	9.11	9.63	10.02	10.28	10.23	10.30	2.49
7. COAL MINING	55.81	59.08	61.68	63.57	66.02	67.77	3.96
8. CRUDE PETROLEUM & N. GAS	32.26	32.25	32.19	31.60	31.17	31.43	-0.52
9. STONE&CLAY MINING & QUARRYING	17.00	17.36	17.94	18.69	19.10	19.27	2.54
10. CHEM&FERTILIZER MIN. MINING	2.97	3.05	3.15	3.23	3.25	3.28	2.01
11. NEW CONSTRUCTION	311.08	317.07	322.97	332.72	340.29	344.56	2.07
13. ORDNANCE & ACCESSORIES	18.76	19.18	19.50	19.95	20.20	20.40	1.69
14. FOOD & KINDRED PRODUCTS	102.80	104.32	105.06	104.80	103.88	103.15	0.07
15. TOBACCO MANUFACTURES	5.95	5.91	5.78	5.65	5.53	5.39	-1.97
16. FABRIC,YARN & THREAD MILLS	31.21	32.09	32.90	33.49	33.74	33.74	1.57
17. MISC. TEXTILE GOODS	9.40	9.77	10.20	10.55	10.75	10.85	2.91
18. APPAREL	79.60	80.54	82.65	84.49	84.87	85.18	1.36
19. MISC. FABRICATED TEXTILE PROD.	10.13	10.34	10.58	10.75	10.84	10.91	1.50
20. LUMBER & WOOD PRODUCTS	67.30	72.44	74.78	77.14	77.49	76.36	2.56
21. WOOD CONTAINERS	2.21	2.20	2.25	2.30	2.33	2.34	1.16
22. HOUSEHOLD FURNITURE	61.24	64.59	66.70	68.94	70.44	71.10	3.03
23. OTHER FURNITURE & FIXTURES	22.50	22.69	23.43	24.16	24.69	25.23	2.32
24. PAPER & ALLIED PRODUCTS	47.63	48.98	49.43	49.52	49.41	49.28	0.68
25. PAPERBOARD CONTAINERS & BOXES	15.54	15.97	16.34	16.65	16.84	16.94	1.74
26. PRINTING & PUBLISHING	35.57	35.89	36.33	36.77	37.07	37.35	0.98
27. CHEMICALS & PRODUCTS	35.74	36.41	36.97	37.33	37.54	37.74	1.10
28. PLASTICS & SYNTHETIC MATLS.	19.77	20.49	21.23	21.76	22.04	22.12	2.27
29. DRUGS,CLEANING & TOILET PREP.	16.03	16.14	16.39	16.60	16.60	16.66	0.77
30. PAINTS & ALLIED PRODUCTS	2.48	2.60	2.69	2.79	2.85	2.88	3.03
31. PET REFINING & REL. PROD.	13.89	13.87	13.95	14.08	14.10	14.09	0.28
32. RUBBER & MISC. PLASTICS PROD.	64.42	66.66	69.53	71.84	73.73	74.52	2.95
34. FOOTWEAR & OTHER LEATHER PROD.	9.58	9.64	9.71	9.71	9.67	9.63	0.10
35. GLASS & GLASS PRODUCTS	18.46	18.75	19.05	19.18	19.07	18.87	0.45
36. STONE & CLAY PRODUCTS	36.14	37.07	37.88	39.01	39.38	39.09	1.58

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
106. OTHER CRAFT&RELATED WORKERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
37. PRIMARY FERROUS METALS	88.89	91.26	93.77	94.60	94.63	93.91	1.11
38. NONFERROUS METALS	36.14	37.54	39.13	40.34	41.05	41.69	2.90
39. METAL CONTAINERS	9.37	9.24	9.26	9.42	9.48	9.53	0.36
40. FAB. STRUCTURAL METAL PRODUCTS	60.70	60.80	62.26	64.30	65.64	66.48	1.84
41. SCREW MACHINE PROD.&STAMPINGS	33.74	35.83	37.35	38.33	38.86	39.32	3.11
42. OTHER FAB. METAL PRODUCTS	27.18	27.98	29.16	30.03	30.66	31.32	2.88
43. ENGINES & TURBINES	10.50	10.83	11.22	11.33	11.39	11.43	1.72
44. FARM & GARDEN MACHINERY	10.21	10.50	11.07	11.24	11.39	11.53	2.46
45. CONSTR. & MINING MACHINERY	17.60	18.61	19.59	20.29	20.84	21.08	3.67
46. MATERIALS HANDLING MACH. & EQ.	6.29	6.50	6.89	7.18	7.37	7.53	3.65
47. METALWORKING MACH. & EQ.	18.55	19.27	20.39	21.19	21.77	22.15	3.62
48. SPECIAL INDUSTRY MACHINERY	15.21	15.53	16.31	17.04	17.46	17.82	3.22
49. GENERAL INDUSTRY MACHINERY	23.13	23.74	24.89	25.58	26.04	26.49	2.74
50. MISC. NONELECTRICAL MACH.	11.69	12.00	12.51	12.79	12.91	13.06	2.23
51. OFFICE,COMPUTING & ACCT. MACH.	23.21	24.24	25.36	25.93	26.39	27.08	3.13
52. SERVICE INDUSTRY MACHINES	12.33	12.82	13.43	13.65	13.68	13.69	2.10
53. ELECTRICAL MACHINERY	26.70	27.23	28.52	29.24	29.62	29.89	2.28
54. HOUSEHOLD APPLIANCES	10.20	10.45	10.71	11.05	11.26	11.39	2.24
55. ELECTRIC LIGHTING & WIRING EQ.	14.75	14.93	15.41	15.85	16.16	16.42	2.17
56. RADIO,TV, & COMMUNICATION EQ.	49.17	49.96	51.17	51.71	51.83	52.36	1.26
57. ELECTRONIC COMPONENTS & ACCESS.	41.47	43.24	45.40	47.23	48.58	49.61	3.65
58. MISC. ELECTRICAL MACH. & EQ.	14.82	15.34	15.95	16.13	16.33	16.46	2.12
59. MOTOR VEHICLES & EQUIPMENT	90.70	94.84	98.09	99.68	100.80	101.39	2.25
60. AIRCRAFT & PARTS	54.00	55.81	56.97	58.39	58.17	57.77	1.36
61. OTHER TRANSPORTATION EQ.	38.06	39.20	40.60	41.49	41.61	41.98	1.98
62. INSTRUMENTS & SUPPLIES	37.53	38.21	39.76	41.34	42.47	43.21	2.86
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	28.18	28.68	30.01	31.44	32.60	33.53	3.54
64. MISC. MANUFACTURING	30.69	31.05	31.94	32.74	33.14	33.28	1.63
65. TRANSPORTATION & WAREHOUSING	150.48	152.58	154.39	156.82	156.46	155.12	0.61
66. COMMUNICATION EXC. RADIO & TV	60.99	61.59	63.21	63.99	65.60	66.32	1.69
67. RADIO & TV BROADCASTING	0.48	0.50	0.51	0.52	0.52	0.53	1.74
68. UTILITIES	109.26	109.31	109.29	109.22	109.26	109.14	-0.02
69. WHOLESALE & RETAIL TRADE	389.19	401.20	413.22	423.33	431.17	439.35	2.45
70. FINANCE & INSURANCE	4.33	4.41	4.51	4.63	4.76	4.88	2.42
71. REAL ESTATE & RENTAL	3.52	3.58	3.66	3.73	3.78	3.82	1.63
72. PERSONAL SERVICES EXC. AUTO.	62.46	63.15	64.13	65.12	66.12	66.98	1.41
73. BUSINESS SERVICES	41.05	42.02	43.14	44.51	45.62	46.44	2.50
74. EATING & DRINKING PLACES	1.41	1.43	1.46	1.47	1.48	1.48	1.05
75. AUTOMOBILE REPAIR & SERVICE	18.32	18.75	18.98	19.14	19.31	19.53	1.29

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
106. OTHER CRAFT&RELATED WORKERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
76. AMUSEMENTS	19.95	19.89	20.12	20.28	20.46	20.60	0.65
77. MISC. SERVICES	135.13	137.77	140.78	144.80	149.33	154.32	2.69
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	143.39	146.57	150.05	153.09	155.08	156.55	1.77
82. GOVERNMENT INDUSTRY	232.92	231.13	231.82	233.74	235.75	238.83	0.50
TOTAL, ALL INDUSTRIES	3,461.70	3,538.64	3,622.48	3,695.90	3,744.03	3,779.42	1.77

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
107. AUXILIALRY EQUIPMENT OPERATORS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
68. UTILITIES	0.17	0.18	0.20	0.21	0.22	0.22	4.99
TOTAL, ALL INDUSTRIES	0.17	0.18	0.20	0.21	0.22	0.22	4.99
TOTAL EMPLOYMENT							
68. UTILITIES	7.93	7.86	7.79	7.72	7.65	7.58	-0.90
TOTAL, ALL INDUSTRIES	7.93	7.86	7.79	7.72	7.65	7.58	-0.90

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
108. BLUE COLLAR WORKER SUPERVISORS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
1. LIVESTOCK & PRODUCTS	0.02	0.02	0.02	0.02	0.02	0.02	2.61
2. OTHER AGRICULTURAL PRODUCTS	0.03	0.03	0.03	0.03	0.03	0.03	2.77
3. FORESTRY & FISHERY PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	5.77
4. AGR.,FORESTRY,&FISHERY SERV.	0.07	0.08	0.08	0.09	0.10	0.10	6.86
5. IRON ORE MINING	0.15	0.17	0.18	0.20	0.21	0.21	7.79
6. NONFERROUS METAL MINING	0.22	0.25	0.28	0.31	0.34	0.37	11.12
7. COAL MINING	0.50	0.57	0.63	0.68	0.75	0.78	9.41
8. CRUDE PETROLEUM & N. GAS	0.71	0.76	0.78	0.83	0.87	0.87	4.07
9. STONE&CLAY MINING & QUARRYING	0.09	0.10	0.11	0.12	0.14	0.14	10.04
10. CHEM&FERTILIZER MIN. MINING	0.02	0.02	0.02	0.03	0.03	0.03	7.91
11. NEW CONSTRUCTION	2.16	2.46	2.67	2.96	3.21	3.39	9.38
13. ORDNANCE & ACCESSORIES	4.52	5.11	5.57	6.02	6.35	6.59	7.83
14. FOOD & KINDRED PRODUCTS	0.40	0.43	0.45	0.48	0.50	0.51	5.22
16. FABRIC,YARN & THREAD MILLS	0.21	0.23	0.24	0.26	0.27	0.28	5.16
17. MISC. TEXTILE GOODS	0.06	0.06	0.07	0.07	0.08	0.08	7.28
18. APPAREL	0.10	0.11	0.11	0.12	0.13	0.13	6.14
19. MISC. FABRICATED TEXTILE PROD.	0.12	0.13	0.14	0.14	0.15	0.15	4.21
20. LUMBER & WOOD PRODUCTS	0.36	0.41	0.45	0.49	0.53	0.56	9.13
21. WOOD CONTAINERS	0.06	0.07	0.08	0.09	0.10	0.10	9.82
22. HOUSEHOLD FURNITURE	0.06	0.06	0.07	0.07	0.07	0.07	3.70
23. OTHER FURNITURE & FIXTURES	0.10	0.10	0.10	0.11	0.12	0.12	4.69
24. PAPER & ALLIED PRODUCTS	0.37	0.41	0.44	0.47	0.50	0.52	6.83
25. PAPERBOARD CONTAINERS & BOXES	0.19	0.21	0.23	0.26	0.28	0.29	8.83
26. PRINTING & PUBLISHING	0.37	0.40	0.43	0.46	0.48	0.50	6.39
27. CHEMICALS & PRODUCTS	1.15	1.26	1.35	1.47	1.57	1.64	7.44
28. PLASTICS & SYNTHETIC MATLS.	0.27	0.30	0.33	0.36	0.39	0.41	8.79
29. DRUGS,CLEANING & TOILET PREP.	0.03	0.03	0.03	0.03	0.04	0.04	4.24
30. PAINTS & ALLIED PRODUCTS	0.09	0.10	0.11	0.12	0.13	0.14	8.29
31. PET REFINING & REL. PROD.	0.41	0.44	0.46	0.49	0.52	0.53	5.37
32. RUBBER & MISC. PLASTICS PROD.	0.80	0.91	1.01	1.13	1.24	1.31	10.36
34. FOOTWEAR & OTHER LEATHER PROD.	0.01	0.01	0.01	0.01	0.02	0.02	5.56
35. GLASS & GLASS PRODUCTS	0.15	0.16	0.18	0.20	0.21	0.23	9.28
36. STONE & CLAY PRODUCTS	0.49	0.55	0.59	0.65	0.69	0.72	8.23
37. PRIMARY FERROUS METALS	2.57	2.86	3.09	3.37	3.60	3.75	7.84
38. NONFERROUS METALS	1.57	1.80	1.98	2.18	2.35	2.46	9.39
39. METAL CONTAINERS	0.05	0.05	0.06	0.06	0.07	0.07	6.61
40. FAB. STRUCTURAL METAL PRODUCTS	0.99	1.11	1.19	1.28	1.36	1.43	7.65

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
108. BLUE COLLAR WORKER SUPERVISORS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
41. SCREW MACHINE PROD.&STAMPINGS	0.82	0.92	1.00	1.10	1.18	1.24	8.62
42. OTHER FAB. METAL PRODUCTS	0.56	0.64	0.70	0.78	0.84	0.89	9.54
43. ENGINES & TURBINES	0.31	0.35	0.38	0.40	0.43	0.44	7.72
44. FARM & GARDEN MACHINERY	0.01	0.02	0.02	0.02	0.02	0.02	8.11
45. CONSTR. & MINING MACHINERY	0.11	0.12	0.13	0.14	0.15	0.15	7.24
46. MATERIALS HANDLING MACH. & EQ.	0.19	0.21	0.23	0.26	0.28	0.29	9.12
47. METALWORKING MACH. & EQ.	0.46	0.53	0.58	0.64	0.69	0.72	9.36
48. SPECIAL INDUSTRY MACHINERY	0.03	0.04	0.04	0.05	0.06	0.06	12.06
49. GENERAL INDUSTRY MACHINERY	0.41	0.46	0.50	0.53	0.57	0.59	7.51
50. MISC. NONELECTRICAL MACH.	0.71	0.78	0.85	0.94	1.00	1.03	7.54
51. OFFICE,COMPUTING & ACCT. MACH.	0.28	0.32	0.35	0.37	0.39	0.40	7.32
52. SERVICE INDUSTRY MACHINES	0.11	0.13	0.14	0.16	0.18	0.21	13.37
53. ELECTRICAL MACHINERY	0.50	0.57	0.62	0.68	0.74	0.77	9.10
54. HOUSEHOLD APPLIANCES	0.01	0.01	0.01	0.01	0.01	0.01	8.81
55. ELECTRIC LIGHTING & WIRING EQ.	0.25	0.28	0.30	0.33	0.36	0.37	8.25
56. RADIO,TV, & COMMUNICATION EQ.	5.89	6.77	7.44	8.06	8.49	8.67	8.05
57. ELECTRONIC COMPONENTS & ACCESS.	2.79	3.32	3.74	4.19	4.57	4.79	11.37
58. MISC. ELECTRICAL MACH. & EQ.	0.16	0.19	0.21	0.23	0.25	0.26	9.57
59. MOTOR VEHICLES & EQUIPMENT	0.66	0.78	0.89	1.06	1.24	1.45	17.14
60. AIRCRAFT & PARTS	9.66	10.79	11.73	12.77	13.48	13.65	7.15
61. OTHER TRANSPORTATION EQ.	3.37	3.56	3.67	3.75	3.86	3.98	3.38
62. INSTRUMENTS & SUPPLIES	1.60	1.80	1.97	2.16	2.30	2.39	8.35
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.28	0.31	0.34	0.37	0.40	0.42	8.52
64. MISC. MANUFACTURING	0.09	0.10	0.10	0.11	0.12	0.12	6.08
65. TRANSPORTATION & WAREHOUSING	2.69	2.83	2.95	3.11	3.22	3.27	3.96
66. COMMUNICATION EXC. RADIO & TV	1.32	1.40	1.49	1.60	1.69	1.72	5.39
68. UTILITIES	0.76	0.83	0.89	0.96	1.00	1.02	5.87
69. WHOLESALE & RETAIL TRADE	0.90	1.02	1.13	1.25	1.36	1.44	9.74
70. FINANCE & INSURANCE	0.02	0.02	0.02	0.02	0.03	0.03	9.84
71. REAL ESTATE & RENTAL	0.04	0.04	0.05	0.05	0.06	0.06	8.46
72. PERSONAL SERVICES EXC. AUTO.	0.24	0.27	0.30	0.32	0.35	0.36	8.44
73. BUSINESS SERVICES	0.93	1.04	1.14	1.25	1.34	1.39	8.33
74. EATING & DRINKING PLACES	0.02	0.02	0.02	0.02	0.03	0.03	9.75
75. AUTOMOBILE REPAIR & SERVICE	0.17	0.18	0.20	0.22	0.23	0.24	8.06
76. AMUSEMENTS	0.02	0.02	0.02	0.03	0.03	0.03	9.16
77. MISC. SERVICES	0.20	0.20	0.21	0.23	0.24	0.25	4.75
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	1.24	1.34	1.42	1.50	1.55	1.58	4.93
82. GOVERNMENT INDUSTRY	2.39	2.35	2.41	2.49	2.55	2.58	1.55
TOTAL, ALL INDUSTRIES	59.70	66.41	71.81	77.90	82.69	85.54	7.46

TOTAL EMPLOYMENT

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
108. BLUE COLLAR WORKER SUPERVISORS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
1. LIVESTOCK & PRODUCTS	2.81	2.84	2.79	2.74	2.72	2.70	-0.80
2. OTHER AGRICULTURAL PRODUCTS	20.37	20.45	20.54	20.47	20.43	20.40	0.03
3. FORESTRY & FISHERY PRODUCTS	0.40	0.43	0.45	0.47	0.47	0.46	2.81
4. AGR.,FORESTRY,&FISHERY SERV.	3.90	4.01	4.06	4.14	4.19	4.26	1.76
5. IRON ORE MINING	2.87	3.08	3.29	3.25	3.19	3.11	1.63
6. NONFERROUS METAL MINING	3.71	3.92	4.08	4.19	4.17	4.20	2.53
7. COAL MINING	17.86	18.85	19.62	20.17	20.90	21.41	3.69
8. CRUDE PETROLEUM & N. GAS	9.68	9.65	9.62	9.42	9.28	9.34	-0.71
9. STONE&CLAY MINING & QUARRYING	2.85	2.91	3.01	3.14	3.21	3.24	2.63
10. CHEM&FERTILIZER MIN. MINING	0.95	0.97	1.01	1.03	1.04	1.05	2.01
11. NEW CONSTRUCTION	57.57	59.22	60.84	63.20	65.14	66.45	2.91
13. ORDNANCE & ACCESSORIES	7.48	7.65	7.78	7.96	8.06	8.15	1.73
14. FOOD & KINDRED PRODUCTS	59.56	60.46	60.90	60.77	60.26	59.85	0.10
16. FABRIC,YARN & THREAD MILLS	17.22	17.73	18.21	18.58	18.76	18.79	1.76
17. MISC. TEXTILE GOODS	3.99	4.15	4.33	4.48	4.56	4.60	2.87
18. APPAREL	27.68	27.93	28.58	29.14	29.20	29.23	1.10
19. MISC. FABRICATED TEXTILE PROD.	4.23	4.31	4.41	4.47	4.51	4.53	1.40
20. LUMBER & WOOD PRODUCTS	17.63	19.12	19.89	20.66	20.90	20.75	3.31
21. WOOD CONTAINERS	1.07	1.06	1.08	1.11	1.12	1.13	1.17
22. HOUSEHOLD FURNITURE	10.28	10.84	11.20	11.57	11.83	11.94	3.03
23. OTHER FURNITURE & FIXTURES	6.05	6.10	6.30	6.49	6.63	6.77	2.27
24. PAPER & ALLIED PRODUCTS	19.93	20.55	20.81	20.91	20.92	20.93	0.99
25. PAPERBOARD CONTAINERS & BOXES	8.66	8.90	9.11	9.29	9.39	9.45	1.77
26. PRINTING & PUBLISHING	23.31	23.46	23.69	23.92	24.07	24.20	0.75
27. CHEMICALS & PRODUCTS	23.84	24.24	24.57	24.77	24.88	24.97	0.93
28. PLASTICS & SYNTHETIC MATLS.	11.06	11.48	11.91	12.22	12.39	12.45	2.39
29. DRUGS,CLEANING & TOILET PREP.	8.41	8.47	8.61	8.73	8.74	8.77	0.84
30. PAINTS & ALLIED PRODUCTS	1.73	1.81	1.88	1.94	1.99	2.01	3.06
31. PET REFINING & REL. PROD.	7.64	7.64	7.69	7.77	7.80	7.80	0.42
32. RUBBER & MISC. PLASTICS PROD.	29.47	30.49	31.79	32.84	33.69	34.05	2.93
34. FOOTWEAR & OTHER LEATHER PROD.	4.55	4.58	4.61	4.61	4.59	4.57	0.05
35. GLASS & GLASS PRODUCTS	6.63	6.75	6.86	6.92	6.89	6.83	0.58
36. STONE & CLAY PRODUCTS	15.03	15.32	15.57	15.94	16.00	15.79	1.00
37. PRIMARY FERROUS METALS	36.08	37.19	38.36	38.84	38.99	38.82	1.47
38. NONFERROUS METALS	18.55	19.25	20.04	20.64	20.99	21.29	2.79
39. METAL CONTAINERS	3.41	3.36	3.37	3.43	3.45	3.47	0.36

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
108. BLUE COLLAR WORKER SUPERVISORS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
40. FAB. STRUCTURAL METAL PRODUCTS	22.17	22.23	22.78	23.54	24.05	24.38	1.91
41. SCREW MACHINE PROD.&STAMPINGS	13.32	14.14	14.73	15.10	15.30	15.48	3.04
42. OTHER FAB. METAL PRODUCTS	12.21	12.56	13.09	13.48	13.76	14.05	2.85
43. ENGINES & TURBINES	3.68	3.80	3.94	3.98	4.01	4.02	1.78
44. FARM & GARDEN MACHINERY	4.49	4.61	4.84	4.91	4.96	5.02	2.27
45. CONSTR. & MINING MACHINERY	9.19	9.72	10.23	10.59	10.87	10.99	3.64
46. MATERIALS HANDLING MACH. & EQ.	3.29	3.39	3.60	3.74	3.85	3.93	3.62
47. METALWORKING MACH. & EQ.	8.94	9.30	9.85	10.25	10.55	10.75	3.76
48. SPECIAL INDUSTRY MACHINERY	4.77	4.87	5.12	5.35	5.48	5.59	3.22
49. GENERAL INDUSTRY MACHINERY	9.37	9.61	10.06	10.32	10.50	10.67	2.62
50. MISC. NONELECTRICAL MACH.	6.23	6.39	6.66	6.81	6.88	6.96	2.23
51. OFFICE,COMPUTING & ACCT. MACH.	7.38	7.67	7.99	8.14	8.25	8.44	2.72
52. SERVICE INDUSTRY MACHINES	6.09	6.33	6.63	6.74	6.75	6.75	2.10
53. ELECTRICAL MACHINERY	9.99	10.17	10.62	10.87	10.98	11.06	2.05
54. HOUSEHOLD APPLIANCES	3.82	3.90	3.98	4.09	4.15	4.18	1.83
55. ELECTRIC LIGHTING & WIRING EQ.	5.28	5.31	5.46	5.59	5.67	5.74	1.70
56. RADIO,TV, & COMMUNICATION EQ.	13.94	14.26	14.70	14.95	15.08	15.33	1.91
57. ELECTRONIC COMPONENTS & ACCESS.	12.75	13.30	13.96	14.53	14.94	15.26	3.65
58. MISC. ELECTRICAL MACH. & EQ.	6.06	6.27	6.52	6.60	6.68	6.73	2.12
59. MOTOR VEHICLES & EQUIPMENT	33.96	35.51	36.71	37.30	37.71	37.92	2.23
60. AIRCRAFT & PARTS	19.36	19.87	20.14	20.50	20.27	19.99	0.64
61. OTHER TRANSPORTATION EQ.	11.64	11.99	12.41	12.69	12.72	12.83	1.97
62. INSTRUMENTS & SUPPLIES	13.73	13.99	14.55	15.14	15.55	15.83	2.88
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	6.50	6.59	6.87	7.18	7.41	7.60	3.16
64. MISC. MANUFACTURING	8.17	8.30	8.57	8.82	8.96	9.03	2.04
65. TRANSPORTATION & WAREHOUSING	63.29	64.46	65.51	66.83	66.97	66.69	1.05
66. COMMUNICATION EXC. RADIO & TV	53.38	53.89	55.30	55.98	57.38	58.01	1.68
68. UTILITIES	35.52	35.52	35.50	35.46	35.45	35.39	-0.07
69. WHOLESALE & RETAIL TRADE	147.47	152.40	157.33	161.55	164.91	168.39	2.69
70. FINANCE & INSURANCE	2.02	2.06	2.11	2.18	2.24	2.31	2.73
71. REAL ESTATE & RENTAL	1.45	1.48	1.52	1.55	1.58	1.60	2.08
72. PERSONAL SERVICES EXC. AUTO.	13.22	13.44	13.71	13.99	14.28	14.53	1.90
73. BUSINESS SERVICES	19.16	19.70	20.32	21.06	21.67	22.15	2.95
74. EATING & DRINKING PLACES	1.10	1.12	1.14	1.15	1.15	1.16	1.05
75. AUTOMOBILE REPAIR & SERVICE	11.41	11.73	11.93	12.08	12.24	12.42	1.71
76. AMUSEMENTS	2.08	2.13	2.20	2.27	2.34	2.41	2.93
77. MISC. SERVICES	30.44	31.06	31.77	32.71	33.76	34.92	2.78
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	22.37	22.90	23.48	23.96	24.27	24.50	1.84
82. GOVERNMENT INDUSTRY	56.12	55.71	55.88	56.33	56.80	57.59	0.52

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
108. BLUE COLLAR WORKER SUPERVISORS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
TOTAL, ALL INDUSTRIES	1,216.17	1,245.18	1,276.91	1,302.77	1,319.91	1,332.46	1.84

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE
BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
109. HEAVY EQUIPMENT OPERATORS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
4. AGR.,FORESTRY,&FISHERY SERV.	0.01	0.02	0.02	0.02	0.02	0.02	6.87
5. IRON ORE MINING	0.10	0.12	0.13	0.14	0.15	0.15	7.65
6. NONFERROUS METAL MINING	0.12	0.14	0.15	0.17	0.19	0.20	11.63
7. COAL MINING	0.85	0.97	1.07	1.18	1.29	1.36	9.98
8. CRUDE PETROLEUM & N. GAS	0.32	0.34	0.35	0.37	0.38	0.39	4.08
9. STONE&CLAY MINING & QUARRYING	0.37	0.41	0.45	0.51	0.55	0.59	10.00
10. CHEM&FERTILIZER MIN. MINING	0.02	0.02	0.02	0.02	0.02	0.03	7.90
11. NEW CONSTRUCTION	6.99	7.84	8.36	9.17	9.80	10.21	7.88
20. LUMBER & WOOD PRODUCTS	0.08	0.09	0.10	0.10	0.11	0.11	6.92
24. PAPER & ALLIED PRODUCTS	0.02	0.03	0.03	0.03	0.03	0.03	6.78
31. PET REFINING & REL. PROD.	0.09	0.10	0.10	0.11	0.12	0.12	4.64
36. STONE & CLAY PRODUCTS	0.23	0.27	0.29	0.32	0.35	0.36	9.37
65. TRANSPORTATION & WAREHOUSING	0.22	0.22	0.23	0.24	0.24	0.24	2.11
68. UTILITIES	0.25	0.27	0.29	0.32	0.33	0.34	6.73
69. WHOLESALE & RETAIL TRADE	0.01	0.02	0.02	0.02	0.02	0.02	9.68
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	1.13	1.17	1.22	1.28	1.33	1.36	3.84
82. GOVERNMENT INDUSTRY	0.01	0.01	0.01	0.01	0.01	0.01	1.54
TOTAL, ALL INDUSTRIES	10.83	12.03	12.85	14.02	14.96	15.57	7.53
TOTAL EMPLOYMENT							
4. AGR.,FORESTRY,&FISHERY SERV.	0.77	0.79	0.80	0.81	0.82	0.84	1.77
5. IRON ORE MINING	2.04	2.18	2.33	2.30	2.25	2.19	1.51
6. NONFERROUS METAL MINING	2.01	2.14	2.24	2.31	2.30	2.33	3.01
7. COAL MINING	30.21	32.09	33.60	34.72	36.14	37.18	4.23
8. CRUDE PETROLEUM & N. GAS	4.28	4.27	4.26	4.17	4.11	4.14	-0.70
9. STONE&CLAY MINING & QUARRYING	11.66	11.91	12.31	12.84	13.13	13.25	2.59
10. CHEM&FERTILIZER MIN. MINING	0.85	0.87	0.90	0.92	0.93	0.94	2.00
11. NEW CONSTRUCTION	185.94	188.39	190.80	195.48	198.87	200.34	1.50
20. LUMBER & WOOD PRODUCTS	3.94	4.19	4.26	4.34	4.30	4.18	1.21
24. PAPER & ALLIED PRODUCTS	1.29	1.33	1.34	1.35	1.35	1.35	0.94
31. PET REFINING & REL. PROD.	1.76	1.75	1.75	1.75	1.75	1.73	-0.27
36. STONE & CLAY PRODUCTS	7.22	7.44	7.64	7.90	8.02	7.99	2.06
65. TRANSPORTATION & WAREHOUSING	5.07	5.08	5.07	5.08	5.00	4.89	-0.74
68. UTILITIES	11.48	11.58	11.67	11.75	11.84	11.92	0.75
69. WHOLESALE & RETAIL TRADE	2.19	2.27	2.34	2.40	2.45	2.50	2.63
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	27.22	27.62	28.03	28.61	29.05	29.32	1.50

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
109. HEAVY EQUIPMENT OPERATORS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
82. GOVERNMENT INDUSTRY	65.50	64.89	64.97	65.33	65.71	66.56	0.32
TOTAL, ALL INDUSTRIES	365.83	371.19	376.73	384.48	390.43	394.05	1.50

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
110. INSPECTORS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
6. NONFERROUS METAL MINING	0.01	0.01	0.01	0.01	0.01	0.01	9.94
8. CRUDE PETROLEUM & N. GAS	0.02	0.02	0.02	0.02	0.02	0.02	4.35
11. NEW CONSTRUCTION	0.09	0.10	0.11	0.12	0.13	0.14	8.55
13. ORDNANCE & ACCESSORIES	4.62	5.22	5.68	6.14	6.46	6.70	7.71
14. FOOD & KINDRED PRODUCTS	0.09	0.10	0.10	0.11	0.11	0.12	5.62
16. FABRIC,YARN & THREAD MILLS	0.11	0.12	0.13	0.13	0.14	0.14	4.43
17. MISC. TEXTILE GOODS	0.06	0.07	0.07	0.08	0.08	0.09	7.47
18. APPAREL	0.13	0.14	0.15	0.16	0.17	0.18	6.76
19. MISC. FABRICATED TEXTILE PROD.	0.12	0.13	0.14	0.14	0.15	0.15	4.28
20. LUMBER & WOOD PRODUCTS	0.05	0.06	0.06	0.07	0.08	0.08	10.15
21. WOOD CONTAINERS	0.01	0.01	0.01	0.01	0.01	0.01	9.82
22. HOUSEHOLD FURNITURE	0.02	0.03	0.03	0.03	0.03	0.03	3.70
23. OTHER FURNITURE & FIXTURES	0.03	0.03	0.03	0.03	0.03	0.04	4.58
24. PAPER & ALLIED PRODUCTS	0.08	0.09	0.10	0.11	0.11	0.12	7.00
25. PAPERBOARD CONTAINERS & BOXES	0.04	0.04	0.05	0.05	0.06	0.06	8.78
26. PRINTING & PUBLISHING	0.07	0.08	0.08	0.09	0.09	0.09	5.78
27. CHEMICALS & PRODUCTS	0.07	0.08	0.08	0.09	0.10	0.10	7.80
28. PLASTICS & SYNTHETIC MATLS.	0.08	0.09	0.10	0.11	0.12	0.12	8.70
29. DRUGS,CLEANING & TOILET PREP.	0.01	0.02	0.02	0.02	0.02	0.02	4.21
30. PAINTS & ALLIED PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	8.14
31. PET REFINING & REL. PROD.	0.02	0.02	0.02	0.02	0.02	0.02	4.97
32. RUBBER & MISC. PLASTICS PROD.	0.59	0.67	0.74	0.83	0.91	0.96	10.28
34. FOOTWEAR & OTHER LEATHER PROD.	0.01	0.01	0.01	0.01	0.01	0.01	6.07
35. GLASS & GLASS PRODUCTS	0.12	0.14	0.15	0.17	0.18	0.19	9.45
36. STONE & CLAY PRODUCTS	0.15	0.17	0.18	0.20	0.21	0.22	8.46
37. PRIMARY FERROUS METALS	0.85	0.94	1.02	1.12	1.19	1.25	8.10
38. NONFERROUS METALS	0.64	0.73	0.79	0.87	0.93	0.97	8.78
39. METAL CONTAINERS	0.06	0.06	0.06	0.07	0.07	0.08	6.61
40. FAB. STRUCTURAL METAL PRODUCTS	0.45	0.51	0.54	0.59	0.62	0.66	8.01
41. SCREW MACHINE PROD.&STAMPINGS	0.63	0.72	0.78	0.86	0.93	0.97	8.95
42. OTHER FAB. METAL PRODUCTS	0.35	0.40	0.44	0.48	0.52	0.55	9.52
43. ENGINES & TURBINES	0.27	0.31	0.33	0.36	0.38	0.39	7.72
44. FARM & GARDEN MACHINERY	0.01	0.01	0.01	0.01	0.01	0.01	8.11
45. CONSTR. & MINING MACHINERY	0.05	0.06	0.06	0.07	0.07	0.08	7.25
46. MATERIALS HANDLING MACH. & EQ.	0.09	0.11	0.11	0.13	0.14	0.14	9.12
47. METALWORKING MACH. & EQ.	0.26	0.30	0.33	0.37	0.39	0.41	9.36
48. SPECIAL INDUSTRY MACHINERY	0.02	0.03	0.03	0.04	0.04	0.04	12.06

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
110. INSPECTORS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
49. GENERAL INDUSTRY MACHINERY	0.33	0.37	0.40	0.43	0.46	0.47	7.51
50. MISC. NONELECTRICAL MACH.	0.56	0.61	0.67	0.74	0.78	0.81	7.54
51. OFFICE,COMPUTING & ACCT. MACH.	0.45	0.51	0.55	0.59	0.62	0.63	7.33
52. SERVICE INDUSTRY MACHINES	0.08	0.09	0.10	0.11	0.13	0.14	13.37
53. ELECTRICAL MACHINERY	0.39	0.45	0.49	0.54	0.58	0.61	9.12
54. HOUSEHOLD APPLIANCES	0.01	0.01	0.01	0.01	0.02	0.02	9.50
55. ELECTRIC LIGHTING & WIRING EQ.	0.31	0.35	0.38	0.41	0.44	0.46	8.25
56. RADIO,TV, & COMMUNICATION EQ.	7.86	8.88	9.58	10.21	10.57	10.62	6.21
57. ELECTRONIC COMPONENTS & ACCESS.	3.87	4.61	5.19	5.80	6.33	6.63	11.37
58. MISC. ELECTRICAL MACH. & EQ.	0.20	0.23	0.25	0.27	0.30	0.31	9.57
59. MOTOR VEHICLES & EQUIPMENT	0.83	0.99	1.13	1.34	1.57	1.84	17.14
60. AIRCRAFT & PARTS	11.68	13.16	14.45	15.89	16.93	17.32	8.20
61. OTHER TRANSPORTATION EQ.	0.94	0.99	1.02	1.04	1.07	1.10	3.30
62. INSTRUMENTS & SUPPLIES	1.51	1.70	1.86	2.04	2.18	2.25	8.34
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.23	0.25	0.27	0.30	0.33	0.35	8.93
64. MISC. MANUFACTURING	0.06	0.07	0.07	0.08	0.08	0.09	7.60
65. TRANSPORTATION & WAREHOUSING	0.14	0.15	0.15	0.16	0.16	0.16	2.42
66. COMMUNICATION EXC. RADIO & TV	0.01	0.01	0.01	0.01	0.01	0.01	5.48
68. UTILITIES	0.12	0.13	0.14	0.15	0.16	0.16	5.89
72. PERSONAL SERVICES EXC. AUTO.	0.17	0.18	0.19	0.21	0.22	0.22	5.70
73. BUSINESS SERVICES	0.43	0.47	0.51	0.55	0.58	0.60	6.88
76. AMUSEMENTS	0.01	0.01	0.01	0.01	0.01	0.02	7.24
77. MISC. SERVICES	0.03	0.03	0.03	0.03	0.03	0.03	4.31
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.04	0.05	0.05	0.05	0.06	0.06	4.95
82. GOVERNMENT INDUSTRY	0.14	0.14	0.14	0.14	0.14	0.14	0.86
TOTAL, ALL INDUSTRIES	40.71	46.05	50.29	54.87	58.36	60.29	8.17
TOTAL EMPLOYMENT							
6. NONFERROUS METAL MINING	0.12	0.12	0.13	0.13	0.13	0.13	1.44
8. CRUDE PETROLEUM & N. GAS	0.24	0.24	0.24	0.23	0.23	0.23	-0.44
11. NEW CONSTRUCTION	2.42	2.47	2.51	2.59	2.65	2.69	2.13
13. ORDNANCE & ACCESSORIES	7.65	7.81	7.94	8.11	8.21	8.29	1.61
14. FOOD & KINDRED PRODUCTS	13.31	13.56	13.72	13.74	13.67	13.63	0.48
16. FABRIC,YARN & THREAD MILLS	9.14	9.35	9.53	9.66	9.68	9.63	1.05
17. MISC. TEXTILE GOODS	4.14	4.31	4.50	4.67	4.76	4.81	3.06
18. APPAREL	36.17	36.72	37.81	38.78	39.07	39.34	1.69
19. MISC. FABRICATED TEXTILE PROD.	4.20	4.29	4.39	4.46	4.49	4.52	1.47
20. LUMBER & WOOD PRODUCTS	2.45	2.68	2.82	2.95	3.02	3.02	4.27

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
110. INSPECTORS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
21. WOOD CONTAINERS	0.10	0.10	0.11	0.11	0.11	0.11	1.16
22. HOUSEHOLD FURNITURE	4.06	4.28	4.42	4.57	4.67	4.71	3.03
23. OTHER FURNITURE & FIXTURES	1.79	1.81	1.86	1.92	1.96	2.00	2.16
24. PAPER & ALLIED PRODUCTS	4.46	4.61	4.68	4.71	4.72	4.72	1.14
25. PAPERBOARD CONTAINERS & BOXES	1.81	1.86	1.90	1.94	1.96	1.97	1.71
26. PRINTING & PUBLISHING	4.46	4.46	4.48	4.50	4.50	4.50	0.18
27. CHEMICALS & PRODUCTS	1.46	1.49	1.51	1.53	1.54	1.55	1.27
28. PLASTICS & SYNTHETIC MATLS.	3.31	3.44	3.56	3.65	3.70	3.71	2.31
29. DRUGS,CLEANING & TOILET PREP.	4.09	4.12	4.19	4.24	4.25	4.26	0.80
30. PAINTS & ALLIED PRODUCTS	0.17	0.17	0.18	0.19	0.19	0.19	2.91
31. PET REFINING & REL. PROD.	0.36	0.36	0.36	0.36	0.36	0.36	0.05
32. RUBBER & MISC. PLASTICS PROD.	21.71	22.45	23.39	24.14	24.75	25.00	2.86
34. FOOTWEAR & OTHER LEATHER PROD.	2.40	2.43	2.46	2.47	2.47	2.47	0.53
35. GLASS & GLASS PRODUCTS	5.55	5.66	5.77	5.82	5.80	5.76	0.73
36. STONE & CLAY PRODUCTS	4.51	4.61	4.70	4.82	4.85	4.79	1.21
37. PRIMARY FERROUS METALS	11.86	12.26	12.67	12.86	12.94	12.91	1.72
38. NONFERROUS METALS	7.53	7.77	8.05	8.24	8.33	8.41	2.23
39. METAL CONTAINERS	3.86	3.80	3.81	3.88	3.90	3.92	0.36
40. FAB. STRUCTURAL METAL PRODUCTS	10.06	10.13	10.41	10.80	11.07	11.25	2.26
41. SCREW MACHINE PROD.&STAMPINGS	10.33	11.00	11.50	11.83	12.02	12.18	3.35
42. OTHER FAB. METAL PRODUCTS	7.61	7.83	8.16	8.40	8.57	8.75	2.83
43. ENGINES & TURBINES	3.25	3.35	3.47	3.51	3.53	3.54	1.78
44. FARM & GARDEN MACHINERY	2.37	2.43	2.56	2.59	2.62	2.65	2.27
45. CONSTR. & MINING MACHINERY	4.51	4.77	5.02	5.20	5.34	5.40	3.64
46. MATERIALS HANDLING MACH. & EQ.	1.61	1.67	1.77	1.84	1.89	1.93	3.62
47. METALWORKING MACH. & EQ.	5.10	5.31	5.63	5.86	6.03	6.14	3.76
48. SPECIAL INDUSTRY MACHINERY	3.33	3.40	3.56	3.72	3.82	3.90	3.21
49. GENERAL INDUSTRY MACHINERY	7.53	7.72	8.08	8.30	8.44	8.57	2.62
50. MISC. NONELECTRICAL MACH.	4.91	5.03	5.25	5.37	5.41	5.48	2.23
51. OFFICE,COMPUTING & ACCT. MACH.	11.82	12.29	12.81	13.04	13.23	13.53	2.74
52. SERVICE INDUSTRY MACHINES	4.21	4.37	4.58	4.66	4.67	4.67	2.10
53. ELECTRICAL MACHINERY	7.86	8.00	8.36	8.55	8.64	8.71	2.06
54. HOUSEHOLD APPLIANCES	4.27	4.38	4.50	4.66	4.76	4.82	2.48
55. ELECTRIC LIGHTING & WIRING EQ.	6.53	6.58	6.75	6.91	7.02	7.11	1.70
56. RADIO,TV, & COMMUNICATION EQ.	18.61	18.70	18.95	18.94	18.78	18.77	0.17
57. ELECTRONIC COMPONENTS & ACCESS.	17.67	18.43	19.35	20.13	20.70	21.14	3.65
58. MISC. ELECTRICAL MACH. & EQ.	7.27	7.52	7.82	7.91	8.01	8.08	2.12
59. MOTOR VEHICLES & EQUIPMENT	43.07	45.02	46.55	47.30	47.82	48.09	2.23
60. AIRCRAFT & PARTS	23.39	24.24	24.81	25.50	25.47	25.36	1.63

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
110. INSPECTORS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
61. OTHER TRANSPORTATION EQ.	3.24	3.33	3.45	3.52	3.52	3.55	1.88
62. INSTRUMENTS & SUPPLIES	12.98	13.22	13.75	14.30	14.69	14.95	2.87
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	5.23	5.32	5.57	5.83	6.05	6.22	3.55
64. MISC. MANUFACTURING	5.48	5.66	5.93	6.19	6.38	6.51	3.51
65. TRANSPORTATION & WAREHOUSING	3.32	3.33	3.34	3.36	3.31	3.25	-0.44
66. COMMUNICATION EXC. RADIO & TV	0.44	0.45	0.46	0.47	0.48	0.48	1.76
68. UTILITIES	5.70	5.70	5.69	5.69	5.69	5.68	-0.05
72. PERSONAL SERVICES EXC. AUTO.	9.13	9.04	8.99	8.95	8.90	8.83	-0.67
73. BUSINESS SERVICES	8.80	8.92	9.08	9.28	9.43	9.52	1.58
76. AMUSEMENTS	1.13	1.13	1.15	1.16	1.18	1.19	1.13
77. MISC. SERVICES	3.92	3.98	4.05	4.15	4.27	4.40	2.35
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.47	0.48	0.49	0.50	0.51	0.51	1.98
82. GOVERNMENT INDUSTRY	3.74	3.76	3.82	3.92	4.01	4.08	1.72
TOTAL, ALL INDUSTRIES	435.49	447.02	460.66	470.93	476.53	480.27	1.98

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE
BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
111. LENS GRINDERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
35. GLASS & GLASS PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	7.65
56. RADIO,TV, & COMMUNICATION EQ.	0.04	0.05	0.05	0.06	0.06	0.06	8.33
62. INSTRUMENTS & SUPPLIES	0.02	0.02	0.02	0.03	0.03	0.03	8.12
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.29	0.32	0.36	0.40	0.44	0.47	10.23
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.15	0.16	0.18	0.19	0.20	0.21	7.22
TOTAL, ALL INDUSTRIES	0.50	0.57	0.62	0.69	0.74	0.78	9.11
TOTAL EMPLOYMENT							
35. GLASS & GLASS PRODUCTS	0.33	0.33	0.33	0.32	0.32	0.31	-0.92
56. RADIO,TV, & COMMUNICATION EQ.	0.10	0.10	0.10	0.11	0.11	0.11	2.17
62. INSTRUMENTS & SUPPLIES	0.17	0.17	0.18	0.18	0.19	0.19	2.66
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	6.67	6.87	7.28	7.72	8.10	8.42	4.78
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	2.57	2.65	2.80	2.95	3.09	3.20	4.47
TOTAL, ALL INDUSTRIES	9.84	10.13	10.70	11.30	11.81	12.24	4.47

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE
BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
112. MACHINE SETTERS, PLASTIC MATL
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
32. RUBBER & MISC. PLASTICS PROD.	0.17	0.19	0.21	0.24	0.26	0.27	9.87
64. MISC. MANUFACTURING	0.01	0.01	0.01	0.01	0.01	0.01	6.01
82. GOVERNMENT INDUSTRY	0.19	0.19	0.19	0.19	0.19	0.19	-0.33
TOTAL, ALL INDUSTRIES	0.37	0.39	0.41	0.44	0.46	0.48	4.99
TOTAL EMPLOYMENT							
32. RUBBER & MISC. PLASTICS PROD.	6.29	6.48	6.72	6.92	7.07	7.11	2.47
64. MISC. MANUFACTURING	0.72	0.74	0.76	0.78	0.79	0.80	1.97
82. GOVERNMENT INDUSTRY	-0.17	-0.17	-0.17	-0.17	-0.17	-0.17	--
TOTAL, ALL INDUSTRIES	6.87	7.08	7.34	7.56	7.72	7.77	2.49

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
113. PATTERNMAKERS, WOOD
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	0.05	0.06	0.06	0.07	0.07	0.08	9.00
37. PRIMARY FERROUS METALS	0.10	0.10	0.11	0.12	0.13	0.13	6.14
38. NONFERROUS METALS	0.03	0.03	0.03	0.03	0.04	0.04	8.71
40. FAB. STRUCTURAL METAL PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	8.52
41. SCREW MACHINE PROD.&STAMPINGS	0.01	0.01	0.01	0.01	0.01	0.02	7.67
43. ENGINES & TURBINES	0.01	0.01	0.01	0.01	0.01	0.01	7.74
47. METALWORKING MACH. & EQ.	0.03	0.03	0.03	0.04	0.04	0.04	9.37
49. GENERAL INDUSTRY MACHINERY	0.08	0.09	0.10	0.10	0.11	0.11	7.51
56. RADIO,TV, & COMMUNICATION EQ.	0.01	0.02	0.02	0.02	0.02	0.02	7.61
60. AIRCRAFT & PARTS	0.12	0.14	0.15	0.17	0.18	0.19	8.61
61. OTHER TRANSPORTATION EQ.	0.03	0.04	0.04	0.04	0.04	0.04	3.10
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.04	0.04	0.05	0.05	0.05	0.05	5.11
82. GOVERNMENT INDUSTRY	0.03	0.03	0.03	0.03	0.03	0.03	0.82
TOTAL, ALL INDUSTRIES	0.56	0.62	0.67	0.73	0.77	0.80	7.27
TOTAL EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	0.08	0.08	0.09	0.09	0.09	0.09	2.84
37. PRIMARY FERROUS METALS	1.34	1.36	1.38	1.37	1.36	1.33	-0.13
38. NONFERROUS METALS	0.30	0.31	0.32	0.33	0.33	0.34	2.15
40. FAB. STRUCTURAL METAL PRODUCTS	0.13	0.13	0.13	0.14	0.14	0.15	2.73
41. SCREW MACHINE PROD.&STAMPINGS	0.17	0.18	0.19	0.19	0.19	0.19	2.15
43. ENGINES & TURBINES	0.07	0.07	0.07	0.08	0.08	0.08	1.80
47. METALWORKING MACH. & EQ.	0.50	0.52	0.55	0.57	0.59	0.60	3.77
49. GENERAL INDUSTRY MACHINERY	1.82	1.86	1.95	2.00	2.03	2.07	2.62
56. RADIO,TV, & COMMUNICATION EQ.	0.03	0.03	0.04	0.04	0.04	0.04	1.49
60. AIRCRAFT & PARTS	0.25	0.26	0.26	0.27	0.27	0.27	2.02
61. OTHER TRANSPORTATION EQ.	0.12	0.12	0.13	0.13	0.13	0.13	1.69
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.41	0.42	0.43	0.44	0.45	0.45	1.98
82. GOVERNMENT INDUSTRY	0.17	0.17	0.17	0.17	0.17	0.17	0.06
TOTAL, ALL INDUSTRIES	6.24	6.40	6.63	6.76	6.83	6.88	1.98

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
114. PATTERNMAKERS, NEC
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
32. RUBBER & MISC. PLASTICS PROD.	0.02	0.02	0.02	0.02	0.03	0.03	10.76
36. STONE & CLAY PRODUCTS	0.02	0.02	0.03	0.03	0.03	0.03	9.12
82. GOVERNMENT INDUSTRY	0.12	0.12	0.12	0.12	0.12	0.12	-0.33
TOTAL, ALL INDUSTRIES	0.17	0.18	0.18	0.19	0.19	0.19	2.38
TOTAL EMPLOYMENT							
32. RUBBER & MISC. PLASTICS PROD.	0.60	0.63	0.66	0.68	0.70	0.71	3.30
36. STONE & CLAY PRODUCTS	0.64	0.66	0.68	0.70	0.71	0.70	1.83
82. GOVERNMENT INDUSTRY	0.00	0.00	0.00	0.00	0.00	0.00	--
TOTAL, ALL INDUSTRIES	1.35	1.40	1.44	1.49	1.52	1.53	2.49

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
115. SHIPFITTERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
61. OTHER TRANSPORTATION EQ.	3.52	3.72	3.84	3.92	4.05	4.17	3.44
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.02	0.02	0.02	0.02	0.02	0.03	1.86
82. GOVERNMENT INDUSTRY	2.87	2.81	2.86	2.94	2.98	3.00	0.85
TOTAL, ALL INDUSTRIES	6.42	6.55	6.73	6.88	7.05	7.20	2.31
TOTAL EMPLOYMENT							
61. OTHER TRANSPORTATION EQ.	12.16	12.53	12.98	13.27	13.32	13.44	2.02
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.06	0.06	0.06	0.06	0.06	0.06	1.81
82. GOVERNMENT INDUSTRY	4.80	4.79	4.85	4.94	5.04	5.11	1.27
TOTAL, ALL INDUSTRIES	17.02	17.39	17.90	18.29	18.43	18.62	1.81

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
116. SHIP ENGINEERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
8. CRUDE PETROLEUM & N. GAS	0.01	0.01	0.01	0.02	0.02	0.02	4.85
11. NEW CONSTRUCTION	0.01	0.01	0.01	0.02	0.02	0.02	8.39
61. OTHER TRANSPORTATION EQ.	0.02	0.02	0.02	0.02	0.02	0.02	3.46
65. TRANSPORTATION & WAREHOUSING	0.31	0.32	0.34	0.35	0.36	0.37	3.52
TOTAL, ALL INDUSTRIES	0.35	0.37	0.39	0.41	0.42	0.42	3.80
TOTAL EMPLOYMENT							
8. CRUDE PETROLEUM & N. GAS	0.17	0.17	0.18	0.17	0.17	0.17	0.04
11. NEW CONSTRUCTION	0.32	0.33	0.33	0.34	0.35	0.35	1.98
61. OTHER TRANSPORTATION EQ.	0.05	0.05	0.06	0.06	0.06	0.06	2.04
65. TRANSPORTATION & WAREHOUSING	7.26	7.36	7.45	7.57	7.55	7.49	0.62
TOTAL, ALL INDUSTRIES	8.87	8.97	9.08	9.21	9.21	9.17	0.67

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
117. TESTERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	0.64	0.72	0.79	0.85	0.90	0.94	7.96
14. FOOD & KINDRED PRODUCTS	0.06	0.06	0.06	0.07	0.07	0.07	5.05
16. FABRIC,YARN & THREAD MILLS	0.03	0.03	0.03	0.03	0.04	0.04	5.92
17. MISC. TEXTILE GOODS	0.01	0.01	0.01	0.01	0.02	0.02	7.12
20. LUMBER & WOOD PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	11.26
24. PAPER & ALLIED PRODUCTS	0.11	0.12	0.13	0.13	0.14	0.15	6.31
27. CHEMICALS & PRODUCTS	0.09	0.10	0.11	0.11	0.12	0.13	7.75
28. PLASTICS & SYNTHETIC MATLS.	0.06	0.07	0.08	0.09	0.09	0.10	8.70
30. PAINTS & ALLIED PRODUCTS	0.02	0.02	0.02	0.02	0.02	0.02	8.20
31. PET REFINING & REL. PROD.	0.09	0.09	0.10	0.11	0.11	0.11	5.24
32. RUBBER & MISC. PLASTICS PROD.	0.05	0.05	0.06	0.07	0.07	0.08	10.19
35. GLASS & GLASS PRODUCTS	0.03	0.04	0.04	0.04	0.05	0.05	7.99
36. STONE & CLAY PRODUCTS	0.05	0.06	0.06	0.07	0.07	0.07	7.58
37. PRIMARY FERROUS METALS	0.17	0.19	0.20	0.22	0.23	0.24	7.96
38. NONFERROUS METALS	0.13	0.15	0.16	0.18	0.19	0.20	9.54
39. METAL CONTAINERS	0.01	0.01	0.01	0.01	0.02	0.02	6.60
40. FAB. STRUCTURAL METAL PRODUCTS	0.10	0.11	0.12	0.13	0.14	0.15	8.24
41. SCREW MACHINE PROD.&STAMPINGS	0.06	0.07	0.07	0.08	0.08	0.08	7.71
42. OTHER FAB. METAL PRODUCTS	0.09	0.11	0.12	0.13	0.14	0.15	9.87
43. ENGINES & TURBINES	0.10	0.11	0.12	0.13	0.13	0.14	7.72
45. CONSTR. & MINING MACHINERY	0.01	0.01	0.01	0.01	0.01	0.01	7.24
46. MATERIALS HANDLING MACH. & EQ.	0.02	0.02	0.02	0.02	0.02	0.03	9.12
47. METALWORKING MACH. & EQ.	0.04	0.05	0.06	0.06	0.07	0.07	9.37
49. GENERAL INDUSTRY MACHINERY	0.06	0.07	0.07	0.08	0.08	0.09	7.51
50. MISC. NONELECTRICAL MACH.	0.05	0.05	0.05	0.06	0.06	0.07	7.54
51. OFFICE,COMPUTING & ACCT. MACH.	0.06	0.07	0.08	0.08	0.09	0.09	7.31
52. SERVICE INDUSTRY MACHINES	0.02	0.02	0.02	0.03	0.03	0.03	13.36
53. ELECTRICAL MACHINERY	0.23	0.26	0.28	0.31	0.34	0.35	8.96
55. ELECTRIC LIGHTING & WIRING EQ.	0.03	0.03	0.03	0.03	0.04	0.04	8.26
56. RADIO,TV, & COMMUNICATION EQ.	4.11	4.73	5.20	5.63	5.93	6.06	8.04
57. ELECTRONIC COMPONENTS & ACCESS.	1.90	2.26	2.55	2.85	3.11	3.26	11.37
58. MISC. ELECTRICAL MACH. & EQ.	0.02	0.02	0.02	0.02	0.03	0.03	9.57
59. MOTOR VEHICLES & EQUIPMENT	0.11	0.13	0.15	0.17	0.20	0.24	17.14
60. AIRCRAFT & PARTS	1.46	1.65	1.82	2.00	2.14	2.20	8.59
61. OTHER TRANSPORTATION EQ.	0.16	0.17	0.18	0.18	0.18	0.19	2.86
62. INSTRUMENTS & SUPPLIES	0.69	0.78	0.85	0.93	0.99	1.02	8.14
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.07	0.08	0.09	0.10	0.10	0.11	8.56

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
117. TESTERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
64. MISC. MANUFACTURING	0.01	0.01	0.01	0.01	0.01	0.01	6.29
73. BUSINESS SERVICES	0.02	0.02	0.02	0.02	0.02	0.03	7.71
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.01	0.01	0.01	0.01	0.01	0.01	5.21
82. GOVERNMENT INDUSTRY	0.32	0.32	0.32	0.33	0.34	0.34	0.85
TOTAL, ALL INDUSTRIES	11.31	12.89	14.16	15.47	16.49	17.05	8.57
TOTAL EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	1.06	1.08	1.10	1.13	1.14	1.16	1.85
14. FOOD & KINDRED PRODUCTS	8.44	8.56	8.61	8.57	8.49	8.42	-0.07
16. FABRIC,YARN & THREAD MILLS	2.30	2.39	2.47	2.54	2.58	2.60	2.50
17. MISC. TEXTILE GOODS	0.77	0.80	0.83	0.86	0.88	0.88	2.73
20. LUMBER & WOOD PRODUCTS	0.40	0.44	0.47	0.50	0.51	0.52	5.32
24. PAPER & ALLIED PRODUCTS	5.74	5.89	5.93	5.93	5.91	5.88	0.50
27. CHEMICALS & PRODUCTS	1.84	1.88	1.91	1.93	1.94	1.96	1.22
28. PLASTICS & SYNTHETIC MATLS.	2.62	2.72	2.82	2.89	2.93	2.94	2.31
30. PAINTS & ALLIED PRODUCTS	0.30	0.32	0.33	0.34	0.35	0.35	2.97
31. PET REFINING & REL. PROD.	1.64	1.64	1.65	1.66	1.66	1.66	0.30
32. RUBBER & MISC. PLASTICS PROD.	1.71	1.76	1.83	1.89	1.94	1.96	2.77
35. GLASS & GLASS PRODUCTS	1.48	1.49	1.50	1.49	1.47	1.44	-0.61
36. STONE & CLAY PRODUCTS	1.58	1.60	1.62	1.65	1.64	1.61	0.39
37. PRIMARY FERROUS METALS	2.34	2.42	2.49	2.53	2.54	2.53	1.58
38. NONFERROUS METALS	1.53	1.59	1.66	1.71	1.74	1.77	2.93
39. METAL CONTAINERS	0.82	0.80	0.81	0.82	0.83	0.83	0.35
40. FAB. STRUCTURAL METAL PRODUCTS	2.19	2.21	2.28	2.37	2.43	2.47	2.47
41. SCREW MACHINE PROD.&STAMPINGS	0.95	1.00	1.03	1.05	1.06	1.06	2.18
42. OTHER FAB. METAL PRODUCTS	2.01	2.07	2.17	2.24	2.29	2.35	3.16
43. ENGINES & TURBINES	1.14	1.18	1.22	1.24	1.24	1.25	1.78
45. CONSTR. & MINING MACHINERY	0.80	0.84	0.89	0.92	0.94	0.95	3.64
46. MATERIALS HANDLING MACH. & EQ.	0.29	0.29	0.31	0.32	0.33	0.34	3.62
47. METALWORKING MACH. & EQ.	0.85	0.89	0.94	0.98	1.00	1.02	3.77
49. GENERAL INDUSTRY MACHINERY	1.36	1.40	1.46	1.50	1.53	1.55	2.62
50. MISC. NONELECTRICAL MACH.	0.40	0.41	0.43	0.44	0.44	0.44	2.24
51. OFFICE,COMPUTING & ACCT. MACH.	1.66	1.73	1.80	1.83	1.86	1.90	2.72
52. SERVICE INDUSTRY MACHINES	0.98	1.02	1.07	1.09	1.09	1.09	2.10
53. ELECTRICAL MACHINERY	4.58	4.65	4.85	4.96	5.00	5.03	1.92
55. ELECTRIC LIGHTING & WIRING EQ.	0.53	0.53	0.55	0.56	0.57	0.57	1.71
56. RADIO,TV, & COMMUNICATION EQ.	9.74	9.97	10.27	10.44	10.53	10.70	1.90
57. ELECTRONIC COMPONENTS & ACCESS.	8.68	9.05	9.51	9.89	10.17	10.39	3.65

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
117. TESTERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
58. MISC. ELECTRICAL MACH. & EQ.	0.65	0.68	0.70	0.71	0.72	0.72	2.12
59. MOTOR VEHICLES & EQUIPMENT	5.60	5.85	6.05	6.15	6.21	6.25	2.23
60. AIRCRAFT & PARTS	2.92	3.04	3.12	3.22	3.23	3.22	2.00
61. OTHER TRANSPORTATION EQ.	0.56	0.58	0.59	0.60	0.60	0.60	1.45
62. INSTRUMENTS & SUPPLIES	5.93	6.03	6.27	6.50	6.67	6.78	2.69
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	1.67	1.69	1.77	1.84	1.91	1.95	3.19
64. MISC. MANUFACTURING	0.54	0.55	0.57	0.59	0.60	0.60	2.24
73. BUSINESS SERVICES	0.36	0.37	0.38	0.39	0.40	0.41	2.36
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.09	0.10	0.10	0.10	0.10	0.10	1.95
82. GOVERNMENT INDUSTRY	0.62	0.62	0.63	0.64	0.65	0.66	1.02
TOTAL, ALL INDUSTRIES	94.71	97.21	100.17	102.31	103.48	104.32	1.95

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
118. CRAFT&RELATED WORKERS, NEC
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
1. LIVESTOCK & PRODUCTS	0.04	0.04	0.04	0.04	0.04	0.04	2.60
2. OTHER AGRICULTURAL PRODUCTS	0.07	0.07	0.07	0.07	0.07	0.08	2.47
3. FORESTRY & FISHERY PRODUCTS	0.02	0.02	0.02	0.02	0.03	0.03	5.88
4. AGR.,FORESTRY,&FISHERY SERV.	0.05	0.05	0.05	0.06	0.06	0.07	6.86
5. IRON ORE MINING	0.06	0.07	0.08	0.08	0.09	0.09	7.67
6. NONFERROUS METAL MINING	0.19	0.22	0.25	0.27	0.30	0.32	10.71
7. COAL MINING	0.21	0.24	0.26	0.29	0.31	0.33	9.22
8. CRUDE PETROLEUM & N. GAS	1.32	1.41	1.46	1.54	1.62	1.64	4.41
9. STONE&CLAY MINING & QUARRYING	0.07	0.08	0.09	0.10	0.11	0.12	9.51
10. CHEM&FERTILIZER MIN. MINING	0.02	0.03	0.03	0.03	0.03	0.03	7.91
11. NEW CONSTRUCTION	2.44	2.77	3.00	3.34	3.61	3.81	9.35
13. ORDNANCE & ACCESSORIES	1.51	1.71	1.86	2.01	2.12	2.20	7.79
14. FOOD & KINDRED PRODUCTS	0.14	0.16	0.16	0.17	0.18	0.18	4.89
16. FABRIC,YARN & THREAD MILLS	0.03	0.03	0.04	0.04	0.04	0.04	4.59
17. MISC. TEXTILE GOODS	0.01	0.01	0.01	0.01	0.01	0.01	6.64
18. APPAREL	0.05	0.06	0.06	0.06	0.07	0.07	6.11
19. MISC. FABRICATED TEXTILE PROD.	0.05	0.05	0.05	0.06	0.06	0.06	4.67
20. LUMBER & WOOD PRODUCTS	0.89	0.99	1.06	1.15	1.24	1.30	8.00
21. WOOD CONTAINERS	0.06	0.07	0.08	0.08	0.09	0.10	9.82
22. HOUSEHOLD FURNITURE	0.27	0.29	0.31	0.32	0.33	0.32	3.70
23. OTHER FURNITURE & FIXTURES	0.23	0.24	0.25	0.27	0.28	0.29	4.79
24. PAPER & ALLIED PRODUCTS	0.30	0.33	0.35	0.38	0.39	0.40	6.01
25. PAPERBOARD CONTAINERS & BOXES	0.11	0.12	0.13	0.15	0.16	0.16	8.78
26. PRINTING & PUBLISHING	0.12	0.13	0.14	0.16	0.17	0.17	7.88
27. CHEMICALS & PRODUCTS	0.41	0.46	0.49	0.54	0.58	0.61	8.03
28. PLASTICS & SYNTHETIC MAT'S.	0.07	0.07	0.08	0.09	0.09	0.10	8.06
29. DRUGS,CLEANING & TOILET PREP.	0.01	0.01	0.01	0.01	0.01	0.01	3.90
30. PAINTS & ALLIED PRODUCTS	0.01	0.02	0.02	0.02	0.02	0.02	8.23
31. PET REFINING & REL. PROD.	0.13	0.14	0.15	0.16	0.17	0.17	5.18
32. RUBBER & MISC. PLASTICS PROD.	0.13	0.14	0.16	0.19	0.21	0.22	11.71
34. FOOTWEAR & OTHER LEATHER PROD.	0.01	0.01	0.01	0.01	0.01	0.01	5.28
35. GLASS & GLASS PRODUCTS	0.10	0.11	0.12	0.13	0.14	0.15	9.01
36. STONE & CLAY PRODUCTS	0.23	0.27	0.29	0.32	0.35	0.37	10.08
37 PRIMARY FERROUS METALS	2.66	2.93	3.13	3.39	3.58	3.70	6.87
38. NONFERROUS METALS	0.70	0.81	0.89	0.99	1.08	1.14	10.39
39. METAL CONTAINERS	0.02	0.02	0.02	0.02	0.02	0.03	6.61
40. FAB. STRUCTURAL METAL PRODUCTS	1.17	1.31	1.39	1.49	1.58	1.66	7.26

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
118. CRAFT&RELATED WORKERS, NEC
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
41. SCREW MACHINE PROD.&STAMPINGS	0.55	0.62	0.67	0.74	0.79	0.83	8.61
42. OTHER FAB. METAL PRODUCTS	0.24	0.28	0.30	0.33	0.36	0.38	9.59
43. ENGINES & TURBINES	0.20	0.22	0.24	0.26	0.27	0.28	7.42
44. FARM & GARDEN MACHINERY	0.01	0.01	0.01	0.01	0.02	0.02	8.75
45. CONSTR. & MINING MACHINERY	0.04	0.04	0.04	0.05	0.05	0.05	7.40
46. MATERIALS HANDLING MACH. & EQ.	0.06	0.07	0.08	0.08	0.09	0.09	9.28
47. METALWORKING MACH. & EQ.	0.16	0.19	0.20	0.22	0.24	0.24	8.46
48. SPECIAL INDUSTRY MACHINERY	0.05	0.06	0.06	0.07	0.08	0.09	12.06
49. GENERAL INDUSTRY MACHINERY	0.13	0.15	0.16	0.18	0.19	0.20	8.49
50. MISC. NONELECTRICAL MACH.	0.02	0.02	0.02	0.02	0.02	0.02	7.58
51. OFFICE,COMPUTING & ACCT. MACH.	0.09	0.11	0.12	0.13	0.14	0.15	11.25
52. SERVICE INDUSTRY MACHINES	0.02	0.02	0.02	0.03	0.03	0.03	13.35
53. ELECTRICAL MACHINERY	0.21	0.25	0.27	0.31	0.33	0.35	10.75
55. ELECTRIC LIGHTING & WIRING EQ.	0.11	0.13	0.15	0.16	0.18	0.19	11.22
56. RADIO,TV, & COMMUNICATION EQ.	2.85	3.27	3.60	3.90	4.10	4.20	8.07
57. ELECTRONIC COMPONENTS & ACCESS.	0.51	0.61	0.69	0.77	0.84	0.88	11.37
58. MISC. ELECTRICAL MACH. & EQ.	0.02	0.03	0.03	0.03	0.03	0.04	9.56
59. MOTOR VEHICLES & EQUIPMENT	0.15	0.18	0.21	0.25	0.29	0.34	17.46
60. AIRCRAFT & PARTS	4.03	4.56	5.03	5.55	5.93	6.09	8.59
61. OTHER TRANSPORTATION EQ.	2.98	3.15	3.25	3.32	3.42	3.53	3.41
62. INSTRUMENTS & SUPPLIES	0.55	0.62	0.68	0.74	0.79	0.82	8.46
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.35	0.39	0.42	0.46	0.50	0.52	8.20
64. MISC. MANUFACTURING	0.17	0.19	0.20	0.21	0.22	0.22	4.67
65. TRANSPORTATION & WAREHOUSING	3.04	3.18	3.28	3.45	3.54	3.57	3.24
66. COMMUNICATION EXC. RADIO & TV	0.18	0.19	0.20	0.22	0.23	0.23	5.47
67. RADIO & TV BROADCASTING	0.01	0.01	0.01	0.01	0.01	0.01	8.19
68. UTILITIES	1.05	1.14	1.23	1.31	1.37	1.39	5.92
69. WHOLESALE & RETAIL TRADE	1.47	1.65	1.82	2.01	2.18	2.29	9.33
70. FINANCE & INSURANCE	0.02	0.02	0.02	0.02	0.02	0.03	9.16
71. REAL ESTATE & RENTAL	0.05	0.06	0.07	0.07	0.08	0.08	7.62
72. PERSONAL SERVICES EXC. AUTO.	0.74	0.82	0.89	0.98	1.04	1.09	8.22
73. BUSINESS SERVICES	0.62	0.69	0.75	0.82	0.87	0.90	7.80
75. AUTOMOBILE REPAIR & SERVICE	0.10	0.11	0.12	0.12	0.13	0.14	6.86
76. AMUSEMENTS	0.16	0.17	0.18	0.20	0.21	0.22	6.33
77. MISC. SERVICES	0.65	0.67	0.70	0.75	0.79	0.82	4.64
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	4.29	4.50	4.73	4.98	5.14	5.23	4.02
82. GOVERNMENT INDUSTRY	10.01	9.84	10.05	10.34	10.54	10.63	1.20
TOTAL, ALL INDUSTRIES	49.80	53.70	57.15	61.18	64.35	66.26	5.88

2/1/83

TOTAL EMPLOYMENT

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
118. CRAFT&RELATED WORKERS, NEC
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
1. LIVESTOCK & PRODUCTS	6.25	6.30	6.21	6.09	6.05	6.00	-0.80
2. OTHER AGRICULTURAL PRODUCTS	44.94	44.99	45.07	44.78	44.56	44.36	-0.26
3. FORESTRY & FISHERY PRODUCTS	0.79	0.83	0.88	0.92	0.92	0.91	2.92
4. AGR.,FORESTRY,&FISHERY SERV.	2.57	2.64	2.67	2.73	2.76	2.80	1.76
5. IRON ORE MINING	1.20	1.29	1.38	1.36	1.33	1.30	1.52
6. NONFERROUS METAL MINING	3.27	3.45	3.57	3.66	3.63	3.64	2.15
7. COAL MINING	7.58	7.98	8.30	8.51	8.81	9.01	3.51
8. CRUDE PETROLEUM & N. GAS	17.89	17.91	17.90	17.60	17.38	17.55	-0.38
9. STONE&CLAY MINING & QUARRYING	2.33	2.37	2.44	2.54	2.58	2.59	2.14
10. CHEM&FERTILIZER MIN. MINING	1.16	1.19	1.23	1.26	1.27	1.28	2.01
11. NEW CONSTRUCTION	64.84	66.67	68.48	71.11	73.28	74.73	2.88
13. ORDNANCE & ACCESSORIES	2.50	2.56	2.60	2.66	2.69	2.72	1.69
14. FOOD & KINDRED PRODUCTS	21.48	21.74	21.83	21.71	21.46	21.25	-0.22
16. FABRIC,YARN & THREAD MILLS	2.56	2.62	2.68	2.72	2.73	2.72	1.22
17. MISC. TEXTILE GOODS	0.50	0.52	0.54	0.55	0.56	0.56	2.26
18. APPAREL	14.57	14.70	15.04	15.33	15.35	15.37	1.07
19. MISC. FABRICATED TEXTILE PROD.	1.61	1.65	1.70	1.73	1.75	1.77	1.85
20. LUMBER & WOOD PRODUCTS	42.87	46.00	47.34	48.68	48.75	47.89	2.24
21. WOOD CONTAINERS	1.00	1.00	1.02	1.04	1.05	1.06	1.16
22. HOUSEHOLD FURNITURE	46.62	49.17	50.78	52.48	53.63	54.13	3.03
23. OTHER FURNITURE & FIXTURES	14.61	14.75	15.23	15.71	16.07	16.42	2.36
24. PAPER & ALLIED PRODUCTS	16.22	16.59	16.67	16.62	16.51	16.39	0.21
25. PAPERBOARD CONTAINERS & BOXES	4.90	5.04	5.15	5.25	5.31	5.34	1.72
26. PRINTING & PUBLISHING	7.58	7.74	7.94	8.12	8.28	8.43	2.16
27. CHEMICALS & PRODUCTS	8.60	8.80	8.97	9.09	9.18	9.26	1.48
28. PLASTICS & SYNTHETIC MATLS.	2.77	2.85	2.94	3.00	3.02	3.01	1.70
29. DRUGS,CLEANING & TOILET PREP.	2.78	2.79	2.83	2.86	2.85	2.85	0.51
30. PAINTS & ALLIED PRODUCTS	0.28	0.30	0.31	0.32	0.32	0.33	3.00
31. PET REFINING & REL. PROD.	2.48	2.48	2.49	2.51	2.52	2.51	0.24
32. RUBBER & MISC. PLASTICS PROD.	4.64	4.86	5.14	5.37	5.57	5.69	4.19
34. FOOTWEAR & OTHER LEATHER PROD.	2.58	2.59	2.60	2.59	2.57	2.55	-0.21
35. GLASS & GLASS PRODUCTS	4.44	4.50	4.57	4.59	4.56	4.51	0.33
36. STONE & CLAY PRODUCTS	7.16	7.43	7.68	8.00	8.17	8.19	2.73
37. PRIMARY FERROUS METALS	37.27	38.04	38.86	39.00	38.80	38.31	0.56
38. NONFERROUS METALS	8.22	8.62	9.06	9.41	9.66	9.88	3.74
39. METAL CONTAINERS	1.29	1.27	1.27	1.30	1.31	1.31	0.36
40. FAB. STRUCTURAL METAL PRODUCTS	26.15	26.11	26.66	27.45	27.95	28.23	1.55

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
118. CRAFT&RELATED WORKERS, NEC
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
41. SCREW MACHINE PROD.&STAMPINGS	8.96	9.51	9.90	10.16	10.29	10.41	3.04
42. OTHER FAB. METAL PRODUCTS	5.25	5.40	5.63	5.80	5.93	6.05	2.90
43. ENGINES & TURBINES	2.36	2.43	2.51	2.53	2.54	2.54	1.50
44. FARM & GARDEN MACHINERY	3.16	3.26	3.45	3.52	3.58	3.64	2.88
45. CONSTR. & MINING MACHINERY	2.97	3.15	3.32	3.44	3.54	3.58	3.79
46. MATERIALS HANDLING MACH. & EQ.	1.06	1.10	1.17	1.22	1.25	1.28	3.77
47. METALWORKING MACH. & EQ.	3.16	3.26	3.43	3.54	3.61	3.65	2.90
48. SPECIAL INDUSTRY MACHINERY	6.74	6.89	7.23	7.55	7.74	7.90	3.22
49. GENERAL INDUSTRY MACHINERY	3.05	3.16	3.34	3.46	3.55	3.63	3.55
50. MISC. NONELECTRICAL MACH.	0.14	0.15	0.15	0.16	0.16	0.16	2.27
51. OFFICE,COMPUTING & ACCT. MACH.	2.33	2.53	2.75	2.90	3.03	3.19	6.49
52. SERVICE INDUSTRY MACHINES	1.03	1.07	1.13	1.14	1.15	1.15	2.09
53. ELECTRICAL MACHINERY	4.26	4.40	4.67	4.85	4.97	5.08	3.59
55. ELECTRIC LIGHTING & WIRING EQ.	2.36	2.46	2.60	2.73	2.84	2.94	4.49
56. RADIO,TV, & COMMUNICATION EQ.	6.74	6.90	7.11	7.23	7.29	7.41	1.93
57. ELECTRONIC COMPONENTS & ACCESS.	2.35	2.45	2.57	2.67	2.75	2.81	3.65
58. MISC. ELECTRICAL MACH. & EQ.	0.83	0.85	0.89	0.90	0.91	0.92	2.11
59. MOTOR VEHICLES & EQUIPMENT	7.85	8.23	8.53	8.69	8.81	8.88	2.51
60. AIRCRAFT & PARTS	8.08	8.40	8.63	8.90	8.93	8.92	2.00
61. OTHER TRANSPORTATION EQ.	10.29	10.60	10.98	11.23	11.26	11.36	1.99
62. INSTRUMENTS & SUPPLIES	4.72	4.81	5.01	5.22	5.36	5.46	2.98
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	8.11	8.20	8.52	8.87	9.13	9.34	2.86
64. MISC. MANUFACTURING	15.79	15.82	16.12	16.37	16.42	16.34	0.69
65. TRANSPORTATION & WAREHOUSING	71.53	72.35	73.03	73.99	73.63	72.81	0.35
66. COMMUNICATION EXC. RADIO & TV	7.18	7.25	7.45	7.54	7.74	7.83	1.76
67. RADIO & TV BROADCASTING	0.35	0.37	0.38	0.38	0.38	0.39	1.75
68. UTILITIES	48.63	48.65	48.64	48.61	48.63	48.57	-0.02
69. WHOLESALE & RETAIL TRADE	239.53	246.54	253.55	259.38	263.82	268.46	2.31
70. FINANCE & INSURANCE	1.94	1.97	2.01	2.06	2.11	2.16	2.09
71. REAL ESTATE & RENTAL	1.99	2.02	2.05	2.09	2.11	2.13	1.29
72. PERSONAL SERVICES EXC. AUTO.	40.10	40.67	41.42	42.18	42.95	43.62	1.69
73. BUSINESS SERVICES	12.73	13.02	13.36	13.78	14.11	14.36	2.45
75. AUTOMOBILE REPAIR & SERVICE	6.72	6.82	6.85	6.86	6.88	6.91	0.58
76. AMUSEMENTS	16.44	16.33	16.45	16.52	16.60	16.66	0.27
77. MISC. SERVICES	100.77	102.73	104.96	107.94	111.30	115.00	2.68
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	89.84	91.73	93.67	95.47	96.69	97.67	1.68
82. GOVERNMENT INDUSTRY	100.76	99.91	100.16	100.98	101.84	103.05	0.45
TOTAL, ALL INDUSTRIES	1,290.52	1,317.61	1,345.49	1,371.35	1,388.80	1,402.90	1.68

2/1/83

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
119. OPERATIVES
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
1. LIVESTOCK & PRODUCTS	0.06	0.07	0.07	0.07	0.07	0.07	2.61
2. OTHER AGRICULTURAL PRODUCTS	0.11	0.11	0.11	0.12	0.12	0.12	2.50
3. FORESTRY & FISHERY PRODUCTS	0.07	0.07	0.08	0.08	0.09	0.09	5.96
4. AGR.,FORESTRY,&FISHERY SERV.	0.18	0.20	0.21	0.22	0.24	0.25	6.15
5. IRON ORE MINING	0.58	0.67	0.73	0.78	0.82	0.85	7.85
6. NONFERROUS METAL MINING	1.10	1.29	1.44	1.60	1.74	1.85	10.91
7. COAL MINING	2.52	2.86	3.13	3.41	3.71	3.88	8.98
8. CRUDE PETROLEUM & N. GAS	9.06	9.62	9.93	10.44	10.93	11.00	3.94
9. STONE&CLAY MINING & QUARRYING	1.08	1.22	1.33	1.50	1.63	1.74	9.95
10. CHEM&FERTILIZER MIN. MINING	0.15	0.17	0.19	0.20	0.22	0.23	7.91
11. NEW CONSTRUCTION	6.89	7.79	8.39	9.27	9.99	10.49	8.78
13. ORDNANCE & ACCESSORIES	44.22	50.22	54.95	59.62	63.14	65.77	8.26
14. FOOD & KINDRED PRODUCTS	5.33	5.77	6.06	6.41	6.65	6.79	4.96
15. TOBACCO MANUFACTURES	0.03	0.04	0.04	0.04	0.04	0.05	7.15
16. FABRIC,YARN & THREAD MILLS	3.23	3.46	3.62	3.82	4.00	4.10	4.91
17. MISC. TEXTILE GOODS	0.77	0.83	0.90	0.98	1.04	1.08	7.17
18. APPAREL	3.24	3.44	3.61	3.87	4.12	4.35	6.03
19. MISC. FABRICATED TEXTILE PROD.	3.01	3.19	3.32	3.53	3.66	3.79	4.72
20. LUMBER & WOOD PRODUCTS	4.36	4.96	5.38	5.90	6.45	6.86	9.49
21. WOOD CONTAINERS	1.24	1.43	1.57	1.73	1.88	1.98	9.82
22. HOUSEHOLD FURNITURE	0.84	0.90	0.97	1.00	1.02	1.01	3.70
23. OTHER FURNITURE & FIXTURES	1.24	1.29	1.34	1.41	1.49	1.55	4.64
24. PAPER & ALLIED PRODUCTS	3.73	4.10	4.44	4.76	5.02	5.18	6.80
25. PAPERBOARD CONTAINERS & BOXES	2.05	2.30	2.51	2.76	2.97	3.11	8.63
26. PRINTING & PUBLISHING	3.54	3.80	4.03	4.31	4.49	4.58	5.28
27. CHEMICALS & PRODUCTS	6.21	6.82	7.29	7.88	8.43	8.80	7.20
28. PLASTICS & SYNTHETIC MATLS.	1.77	1.97	2.17	2.38	2.55	2.65	8.46
29. DRUGS,CLEANING & TOILET PREP.	0.25	0.26	0.27	0.29	0.30	0.30	3.53
30. PAINTS & ALLIED PRODUCTS	0.91	1.01	1.09	1.19	1.28	1.33	7.97
31. PET REFINING & REL. PROD.	2.28	2.40	2.53	2.69	2.83	2.90	4.96
32. RUBBER & MISC. PLASTICS PROD.	10.08	11.39	12.68	14.22	15.57	16.45	10.29
33. LEATHER TANNING & FINISHING	0.05	0.05	0.05	0.06	0.06	0.06	5.38
34. FOOTWEAR & OTHER LEATHER PROD.	0.34	0.36	0.38	0.41	0.43	0.44	5.52
35. GLASS & GLASS PRODUCTS	1.91	2.16	2.38	2.63	2.85	3.03	9.61
36. STONE & CLAY PRODUCTS	5.96	6.80	7.32	8.08	8.67	9.11	8.87
37. PRIMARY FERROUS METALS	12.64	14.10	15.28	16.69	17.83	18.63	8.07
38. NONFERROUS METALS	12.51	14.33	15.76	17.35	18.69	19.55	9.35

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
119. OPERATIVES
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
39. METAL CONTAINERS	0.44	0.47	0.50	0.54	0.58	0.61	6.60
40. FAB. STRUCTURAL METAL PRODUCTS	12.22	13.75	14.70	15.83	16.79	17.71	7.70
41. SCREW MACHINE PROD.&STAMPINGS	8.86	9.89	10.62	11.58	12.27	12.77	7.57
42. OTHER FAB. METAL PRODUCTS	7.91	9.03	9.89	10.94	11.83	12.48	9.56
43. ENGINES & TURBINES	2.90	3.27	3.58	3.80	4.01	4.18	7.60
44. FARM & GARDEN MACHINERY	0.19	0.21	0.24	0.26	0.27	0.28	7.92
45. CONSTR. & MINING MACHINERY	1.21	1.35	1.46	1.57	1.67	1.72	7.27
46. MATERIALS HANDLING MACH. & EQ.	2.08	2.38	2.59	2.86	3.08	3.21	9.14
47. METALWORKING MACH. & EQ.	6.66	7.64	8.38	9.26	9.95	10.38	9.28
48. SPECIAL INDUSTRY MACHINERY	0.46	0.53	0.59	0.68	0.76	0.80	11.85
49. GENERAL INDUSTRY MACHINERY	4.86	5.44	5.86	6.30	6.69	6.96	7.45
50. MISC. NONELECTRICAL MACH.	12.63	13.74	15.09	16.57	17.61	18.15	7.53
51. OFFICE,COMPUTING & ACCT. MACH.	3.80	4.31	4.65	4.96	5.13	5.24	6.67
52. SERVICE INDUSTRY MACHINES	1.45	1.68	1.86	2.13	2.42	2.71	13.37
53. ELECTRICAL MACHINERY	7.23	8.26	9.03	9.90	10.66	11.12	9.00
54. HOUSEHOLD APPLIANCES	0.20	0.22	0.24	0.27	0.29	0.31	9.51
55. ELECTRIC LIGHTING & WIRING EQ.	4.34	4.89	5.24	5.75	6.16	6.42	8.16
56. RADIO,TV, & COMMUNICATION EQ.	73.00	83.53	91.34	98.60	103.31	105.16	7.58
57. ELECTRONIC COMPONENTS & ACCESS.	47.55	56.44	63.39	70.73	76.98	80.48	11.10
58. MISC. ELECTRICAL MACH. & EQ.	2.48	2.86	3.11	3.42	3.72	3.91	9.57
59. MOTOR VEHICLES & EQUIPMENT	9.03	10.78	12.25	14.55	17.04	19.92	17.14
60. AIRCRAFT & PARTS	72.61	82.00	90.19	99.35	106.07	108.70	8.40
61. OTHER TRANSPORTATION EQ.	27.11	28.59	29.52	30.14	31.10	32.06	3.41
62. INSTRUMENTS & SUPPLIES	22.26	25.08	27.37	29.95	31.89	33.01	8.20
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	2.63	2.89	3.14	3.46	3.74	3.94	8.43
64. MISC. MANUFACTURING	1.91	2.09	2.22	2.39	2.52	2.60	6.35
65. TRANSPORTATION & WAREHOUSING	44.41	47.67	50.54	54.41	57.36	59.24	5.93
66. COMMUNICATION EXC. RADIO & TV	0.13	0.14	0.15	0.16	0.17	0.17	5.66
67. RADIO & TV BROADCASTING	0.01	0.01	0.01	0.01	0.01	0.01	8.15
68. UTILITIES	1.02	1.13	1.22	1.32	1.39	1.43	6.91
69. WHOLESALE & RETAIL TRADE	12.66	14.23	15.60	17.20	18.52	19.40	8.92
70. FINANCE & INSURANCE	0.05	0.06	0.07	0.07	0.08	0.08	9.38
71. REAL ESTATE & RENTAL	0.08	0.09	0.10	0.10	0.11	0.12	8.67
72. PERSONAL SERVICES EXC. AUTO.	7.70	8.55	9.17	9.90	10.45	10.85	7.09
73. BUSINESS SERVICES	7.69	8.60	9.41	10.34	11.06	11.46	8.31
74. EATING & DRINKING PLACES	0.41	0.47	0.53	0.58	0.63	0.66	9.76
75. AUTOMOBILE REPAIR & SERVICE	1.81	2.01	2.18	2.37	2.53	2.62	7.69
76. AMUSEMENTS	0.12	0.14	0.15	0.16	0.18	0.19	8.54
77. MISC. SERVICES	2.31	2.37	2.47	2.62	2.75	2.82	4.07

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
119. OPERATIVES
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	25.29	27.37	29.15	31.00	32.16	32.76	5.31
82. GOVERNMENT INDUSTRY	41.76	41.06	41.97	43.25	44.09	44.51	1.28
TOTAL, ALL INDUSTRIES	635.01	706.70	765.27	830.99	883.00	915.17	7.58
TOTAL EMPLOYMENT							
1. LIVESTOCK & PRODUCTS	10.22	10.31	10.15	9.97	9.90	9.82	-0.80
2. OTHER AGRICULTURAL PRODUCTS	73.65	73.74	73.89	73.44	73.09	72.79	-0.23
3. FORESTRY & FISHERY PRODUCTS	2.66	2.81	2.99	3.12	3.12	3.09	3.00
4. AGR.,FORESTRY,&FISHERY SERV.	9.95	10.15	10.19	10.34	10.40	10.50	1.08
5. IRON ORE MINING	11.39	12.21	13.06	12.92	12.66	12.38	1.69
6. NONFERROUS METAL MINING	18.93	19.97	20.75	21.27	21.12	21.25	2.34
7. COAL MINING	90.06	94.58	98.03	100.40	103.66	105.86	3.29
8. CRUDE PETROLEUM & N. GAS	122.81	122.37	121.79	119.17	117.17	117.79	-0.83
9. STONE&CLAY MINING & QUARRYING	34.44	35.16	36.34	37.88	38.71	39.06	2.55
10. CHEM&FERTILIZER MIN. MINING	7.67	7.87	8.13	8.33	8.40	8.48	2.01
11. NEW CONSTRUCTION	183.25	187.33	191.36	197.67	202.68	205.74	2.34
13. ORDNANCE & ACCESSORIES	73.15	75.12	76.75	78.83	80.17	81.31	2.14
14. FOOD & KINDRED PRODUCTS	797.83	807.81	811.75	807.93	799.12	791.73	-0.15
15. TOBACCO MANUFACTURES	26.49	26.49	26.16	25.74	25.45	24.99	-1.16
16. FABRIC,YARN & THREAD MILLS	259.27	266.41	272.97	277.79	279.72	279.55	1.52
17. MISC. TEXTILE GOODS	52.65	54.69	56.98	58.89	59.91	60.37	2.77
18. APPAREL	900.79	908.00	928.30	945.52	946.37	946.49	0.99
19. MISC. FABRICATED TEXTILE PROD.	102.06	104.67	107.53	109.62	110.97	112.09	1.89
20. LUMBER & WOOD PRODUCTS	210.91	229.52	239.50	249.68	253.41	252.27	3.65
21. WOOD CONTAINERS	20.82	20.79	21.18	21.71	21.94	22.06	1.16
22. HOUSEHOLD FURNITURE	145.05	152.98	157.99	163.29	166.85	168.41	3.03
23. OTHER FURNITURE & FIXTURES	78.05	78.63	81.11	83.56	85.33	87.11	2.22
24. PAPER & ALLIED PRODUCTS	200.35	206.60	209.10	210.10	210.19	210.19	0.96
25. PAPERBOARD CONTAINERS & BOXES	93.39	95.78	97.85	99.57	100.53	101.00	1.58
26. PRINTING & PUBLISHING	225.39	224.36	224.20	224.02	223.10	222.09	-0.29
27. CHEMICALS & PRODUCTS	129.05	130.93	132.42	133.20	133.49	133.72	0.71
28. PLASTICS & SYNTHETIC MATLS.	73.21	75.74	78.34	80.12	81.02	81.13	2.08
29. DRUGS,CLEANING & TOILET PREP.	71.28	71.32	71.98	72.42	72.02	71.82	0.15
30. PAINTS & ALLIED PRODUCTS	17.29	18.06	18.66	19.26	19.61	19.80	2.76
31. PET REFINING & REL. PROD.	42.25	42.09	42.24	42.51	42.48	42.32	0.03
32. RUBBER & MISC. PLASTICS PROD.	370.48	382.98	399.05	411.96	422.42	426.65	2.86
33. LEATHER TANNING & FINISHING	8.95	9.25	9.56	9.58	9.57	9.54	1.29
34. FOOTWEAR & OTHER LEATHER PROD.	128.26	128.92	129.80	129.73	129.01	128.34	0.01

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
119. OPERATIVES
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
35. GLASS & GLASS PRODUCTS	86.94	88.72	90.56	91.55	91.41	90.84	0.88
36. STONE & CLAY PRODUCTS	184.48	189.22	193.42	199.20	201.14	199.66	1.59
37. PRIMARY FERROUS METALS	177.38	183.24	189.40	192.17	193.28	192.82	1.68
38. NONFERROUS METALS	147.78	153.28	159.53	164.23	166.90	169.27	2.75
39. METAL CONTAINERS	29.83	29.41	29.48	29.99	30.20	30.36	0.36
40. FAB. STRUCTURAL METAL PRODUCTS	273.78	274.62	281.56	291.19	297.59	301.76	1.97
41. SCREW MACHINE PROD.&STAMPINGS	144.45	151.61	156.31	158.78	159.41	159.85	2.05
42. OTHER FAB. METAL PRODUCTS	171.95	177.00	184.48	189.96	193.93	198.08	2.87
43. ENGINES & TURBINES	34.81	35.89	37.18	37.53	37.69	37.81	1.66
44. FARM & GARDEN MACHINERY	58.86	60.29	63.29	64.05	64.67	65.29	2.10
45. CONSTR. & MINING MACHINERY	102.21	108.07	113.76	117.82	120.99	122.37	3.67
46. MATERIALS HANDLING MACH. & EQ.	36.54	37.71	40.01	41.66	42.80	43.70	3.65
47. METALWORKING MACH. & EQ.	129.34	134.49	142.38	148.04	152.21	154.97	3.68
48. SPECIAL INDUSTRY MACHINERY	63.69	64.91	68.02	70.94	72.54	73.93	3.03
49. GENERAL INDUSTRY MACHINERY	110.78	113.45	118.70	121.78	123.77	125.67	2.56
50. MISC. NONELECTRICAL MACH.	110.30	113.16	117.93	120.58	121.68	123.09	2.22
51. OFFICE,COMPUTING & ACCT. MACH.	100.69	103.98	107.66	108.96	109.86	111.74	2.10
52. SERVICE INDUSTRY MACHINES	80.03	83.18	87.15	88.56	88.77	88.81	2.10
53. ELECTRICAL MACHINERY	145.26	147.62	154.10	157.46	159.01	159.99	1.95
54. HOUSEHOLD APPLIANCES	79.38	81.55	83.76	86.61	88.49	89.72	2.48
55. ELECTRIC LIGHTING & WIRING EQ.	90.86	91.39	93.77	95.95	97.31	98.45	1.62
56. RADIO,TV, & COMMUNICATION EQ.	172.84	175.98	180.60	182.83	183.61	185.80	1.46
57. ELECTRONIC COMPONENTS & ACCESS.	217.08	225.78	236.43	245.40	251.81	256.52	3.40
58. MISC. ELECTRICAL MACH. & EQ.	91.36	94.53	98.29	99.43	100.66	101.47	2.12
59. MOTOR VEHICLES & EQUIPMENT	467.01	488.21	504.77	512.86	518.51	521.43	2.23
60. AIRCRAFT & PARTS	145.44	151.00	154.85	159.44	159.55	159.16	1.82
61. OTHER TRANSPORTATION EQ.	93.55	96.39	99.85	102.07	102.37	103.30	2.00
62. INSTRUMENTS & SUPPLIES	191.29	194.54	202.16	209.95	215.43	218.92	2.74
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	60.63	61.41	63.97	66.72	68.86	70.54	3.07
64. MISC. MANUFACTURING	172.83	176.08	182.35	188.12	191.66	193.66	2.30
65. TRANSPORTATION & WAREHOUSING	1,044.67	1,084.78	1,123.70	1,168.16	1,192.41	1,209.28	2.97
66. COMMUNICATION EXC. RADIO & TV	5.19	5.25	5.40	5.48	5.64	5.71	1.94
67. RADIO & TV BROADCASTING	0.35	0.36	0.37	0.38	0.38	0.38	1.71
68. UTILITIES	47.50	47.99	48.43	48.86	49.32	49.71	0.91
69. WHOLESALE & RETAIL TRADE	2,068.54	2,120.65	2,172.53	2,214.22	2,243.94	2,275.42	1.92
70. FINANCE & INSURANCE	6.10	6.20	6.33	6.49	6.66	6.83	2.29
71. REAL ESTATE & RENTAL	2.82	2.89	2.97	3.05	3.11	3.16	2.28
72. PERSONAL SERVICES EXC. AUTO.	420.02	421.28	424.46	427.75	431.07	433.41	0.63
73. BUSINESS SERVICES	158.44	162.93	168.02	174.10	179.16	183.11	2.94

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
119. OPERATIVES
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
74. EATING & DRINKING PLACES	26.76	27.24	27.69	27.93	28.12	28.21	1.06
75. AUTOMOBILE REPAIR & SERVICE	124.71	127.71	129.41	130.56	131.83	133.41	1.36
76. AMUSEMENTS	12.77	12.96	13.33	13.66	14.01	14.34	2.34
77. MISC. SERVICES	357.84	362.59	368.36	376.74	386.46	397.32	2.12
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	494.21	506.11	519.32	530.12	536.30	540.86	1.82
82. GOVERNMENT INDUSTRY	291.14	289.32	290.71	293.90	297.15	301.12	0.68
TOTAL, ALL INDUSTRIES	13,630.84	13,959.02	14,323.16	14,621.05	14,791.60	14,917.23	1.82

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
120. ASSEMBLERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	20.92	23.81	26.10	28.37	30.10	31.40	8.46
20. LUMBER & WOOD PRODUCTS	0.90	1.04	1.15	1.28	1.42	1.54	11.45
21. WOOD CONTAINERS	0.28	0.32	0.35	0.39	0.42	0.44	9.83
22. HOUSEHOLD FURNITURE	0.18	0.20	0.21	0.22	0.22	0.22	3.70
23. OTHER FURNITURE & FIXTURES	0.34	0.35	0.36	0.38	0.40	0.42	4.40
24. PAPER & ALLIED PRODUCTS	0.17	0.19	0.21	0.22	0.24	0.25	7.32
25. PAPERBOARD CONTAINERS & BOXES	0.12	0.13	0.14	0.16	0.17	0.18	8.78
32. RUBBER & MISC. PLASTICS PROD.	1.05	1.19	1.33	1.50	1.64	1.74	10.49
34. FOOTWEAR & OTHER LEATHER PROD.	0.02	0.02	0.02	0.03	0.03	0.03	7.26
35. GLASS & GLASS PRODUCTS	0.10	0.12	0.14	0.15	0.17	0.19	12.60
36. STONE & CLAY PRODUCTS	0.19	0.21	0.23	0.25	0.26	0.28	8.29
37. PRIMARY FERROUS METALS	0.11	0.12	0.13	0.14	0.15	0.16	8.18
38. NONFERROUS METALS	0.46	0.53	0.58	0.64	0.69	0.72	9.52
39. METAL CONTAINERS	0.07	0.08	0.08	0.09	0.10	0.10	6.60
40. FAB. STRUCTURAL METAL PRODUCTS	2.95	3.32	3.55	3.83	4.07	4.29	7.81
41. SCREW MACHINE PROD.&STAMPINGS	0.91	1.02	1.09	1.19	1.27	1.32	7.69
42. OTHER FAB. METAL PRODUCTS	1.25	1.44	1.58	1.76	1.91	2.02	10.00
43. ENGINES & TURBINES	0.71	0.81	0.88	0.94	0.99	1.04	7.71
44. FARM & GARDEN MACHINERY	0.07	0.08	0.09	0.10	0.10	0.11	8.11
45. CONSTR. & MINING MACHINERY	0.27	0.30	0.32	0.35	0.37	0.38	7.24
46. MATERIALS HANDLING MACH. & EQ.	0.46	0.52	0.57	0.63	0.68	0.71	9.12
47. METALWORKING MACH. & EQ.	1.13	1.29	1.42	1.57	1.69	1.76	9.36
48. SPECIAL INDUSTRY MACHINERY	0.12	0.14	0.15	0.17	0.19	0.21	12.06
49. GENERAL INDUSTRY MACHINERY	1.35	1.51	1.63	1.75	1.86	1.94	7.51
50. MISC. NONELECTRICAL MACH.	1.52	1.65	1.82	1.99	2.12	2.18	7.54
51. OFFICE,COMPUTING & ACCT. MACH.	2.89	3.28	3.53	3.76	3.89	3.97	6.56
52. SERVICE INDUSTRY MACHINES	0.71	0.82	0.91	1.04	1.18	1.33	13.37
53. ELECTRICAL MACHINERY	3.47	3.97	4.34	4.76	5.12	5.34	9.01
54. HOUSEHOLD APPLIANCES	0.11	0.13	0.14	0.15	0.17	0.18	9.51
55. ELECTRIC LIGHTING & WIRING EQ.	2.28	2.57	2.75	3.02	3.24	3.38	8.25
56. RADIO,TV, & COMMUNICATION EQ.	45.88	52.44	57.29	61.79	64.68	65.79	7.48
57. ELECTRONIC COMPONENTS & ACCESS.	29.68	35.27	39.65	44.29	48.25	50.50	11.21
58. MISC. ELECTRICAL MACH. & EQ.	1.49	1.72	1.87	2.07	2.25	2.36	9.57
59. MOTOR VEHICLES & EQUIPMENT	3.78	4.51	5.13	6.09	7.13	8.34	17.14
60. AIRCRAFT & PARTS	26.01	29.37	32.31	35.60	38.01	38.96	8.42
61. OTHER TRANSPORTATION EQ.	4.28	4.53	4.69	4.80	4.96	5.13	3.65
62. INSTRUMENTS & SUPPLIES	13.18	14.84	16.18	17.70	18.83	19.48	8.12

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
120. ASSEMBLERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	1.06	1.17	1.27	1.40	1.52	1.60	8.52
64. MISC. MANUFACTURING	0.60	0.66	0.70	0.76	0.80	0.82	6.49
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.76	0.83	0.89	0.95	0.98	0.99	5.38
82. GOVERNMENT INDUSTRY	0.39	0.38	0.39	0.40	0.41	0.41	0.80
TOTAL, ALL INDUSTRIES	172.22	196.88	216.20	236.66	252.67	262.17	8.77
TOTAL EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	34.61	35.62	36.46	37.51	38.22	38.82	2.32
20. LUMBER & WOOD PRODUCTS	43.33	48.08	51.11	54.23	55.97	56.63	5.50
21. WOOD CONTAINERS	4.67	4.66	4.75	4.87	4.92	4.95	1.17
22. HOUSEHOLD FURNITURE	31.78	33.52	34.62	35.78	36.56	36.90	3.03
23. OTHER FURNITURE & FIXTURES	21.34	21.44	22.06	22.67	23.11	23.54	1.98
24. PAPER & ALLIED PRODUCTS	9.33	9.67	9.83	9.93	9.98	10.02	1.45
25. PAPERBOARD CONTAINERS & BOXES	5.27	5.41	5.53	5.64	5.70	5.73	1.72
32. RUBBER & MISC. PLASTICS PROD.	38.72	40.11	41.87	43.31	44.48	45.00	3.05
34. FOOTWEAR & OTHER LEATHER PROD.	7.61	7.77	7.96	8.08	8.17	8.26	1.66
35. GLASS & GLASS PRODUCTS	4.69	4.94	5.19	5.38	5.51	5.61	3.63
36. STONE & CLAY PRODUCTS	5.75	5.86	5.96	6.11	6.13	6.06	1.05
37. PRIMARY FERROUS METALS	1.50	1.55	1.61	1.63	1.64	1.64	1.79
38. NONFERROUS METALS	5.42	5.63	5.87	6.05	6.16	6.26	2.92
39. METAL CONTAINERS	4.92	4.86	4.87	4.95	4.98	5.01	0.35
40. FAB. STRUCTURAL METAL PRODUCTS	66.03	66.31	68.06	70.45	72.07	73.15	2.07
41. SCREW MACHINE PROD.&STAMPINGS	14.83	15.58	16.08	16.36	16.44	16.50	2.16
42. OTHER FAB. METAL PRODUCTS	27.26	28.18	29.50	30.49	31.25	32.03	3.28
43. ENGINES & TURBINES	8.58	8.85	9.18	9.28	9.33	9.37	1.78
44. FARM & GARDEN MACHINERY	22.12	22.70	23.87	24.20	24.47	24.74	2.27
45. CONSTR. & MINING MACHINERY	22.50	23.79	25.03	25.92	26.61	26.91	3.64
46. MATERIALS HANDLING MACH. & EQ.	8.04	8.30	8.80	9.17	9.41	9.61	3.62
47. METALWORKING MACH. & EQ.	21.88	22.77	24.12	25.10	25.83	26.31	3.76
48. SPECIAL INDUSTRY MACHINERY	16.21	16.56	17.38	18.16	18.60	18.99	3.22
49. GENERAL INDUSTRY MACHINERY	30.72	31.48	32.96	33.84	34.41	34.96	2.62
50. MISC. NONELECTRICAL MACH.	13.26	13.61	14.18	14.50	14.64	14.81	2.23
51. OFFICE,COMPUTING & ACCT. MACH.	76.61	79.02	81.73	82.63	83.23	84.57	2.00
52. SERVICE INDUSTRY MACHINES	39.15	40.69	42.64	43.32	43.42	43.44	2.10
53. ELECTRICAL MACHINERY	69.73	70.87	74.00	75.62	76.38	76.86	1.97
54. HOUSEHOLD APPLIANCES	44.88	46.11	47.36	48.97	50.04	50.73	2.48
55. ELECTRIC LIGHTING & WIRING EQ.	47.67	47.99	49.29	50.47	51.23	51.86	1.70
56. RADIO,TV, & COMMUNICATION EQ.	108.62	110.49	113.28	114.58	114.96	116.23	1.36

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
120. ASSEMBLERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
57. ELECTRONIC COMPONENTS & ACCESS.	135.49	141.08	147.90	153.67	157.85	160.96	3.50
58. MISC. ELECTRICAL MACH. & EQ.	55.15	57.07	59.34	60.02	60.77	61.26	2.12
59. MOTOR VEHICLES & EQUIPMENT	195.42	204.29	211.22	214.61	216.97	218.19	2.23
60. AIRCRAFT & PARTS	52.09	54.09	55.47	57.13	57.17	57.04	1.83
61. OTHER TRANSPORTATION EQ.	14.79	15.27	15.86	16.25	16.33	16.52	2.24
62. INSTRUMENTS & SUPPLIES	113.28	115.12	119.55	124.08	127.23	129.21	2.67
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	24.51	24.85	25.90	27.04	27.93	28.64	3.16
64. MISC. MANUFACTURING	54.39	55.48	57.54	59.43	60.63	61.33	2.43
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	6.50	6.70	6.96	7.15	7.26	7.35	2.49
82. GOVERNMENT INDUSTRY	0.44	0.44	0.45	0.46	0.47	0.48	1.93
TOTAL, ALL INDUSTRIES	1,509.17	1,556.91	1,615.42	1,659.13	1,686.57	1,706.57	2.49

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
121. AIRCRAFT STRUCTURE&SURFACE ASSEMB
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	1.18	1.34	1.47	1.59	1.69	1.76	8.26
60. AIRCRAFT & PARTS	9.66	10.93	12.05	13.29	14.22	14.59	8.59
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.03	0.03	0.03	0.03	0.03	0.03	4.33
82. GOVERNMENT INDUSTRY	0.01	0.01	0.01	0.01	0.01	0.01	-0.33
TOTAL, ALL INDUSTRIES	10.88	12.31	13.56	14.93	15.95	16.40	8.54
TOTAL EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	1.95	2.01	2.05	2.11	2.14	2.17	2.14
60. AIRCRAFT & PARTS	19.36	20.13	20.68	21.33	21.38	21.37	2.00
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.06	0.06	0.06	0.06	0.07	0.07	2.01
82. GOVERNMENT INDUSTRY	0.01	0.01	0.01	0.01	0.01	0.01	-0.33
TOTAL, ALL INDUSTRIES	21.39	22.22	22.82	23.53	23.61	23.63	2.01

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
122. ELECTRICAL&ELECTRONIC ASSEMBLERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	1.28	1.45	1.59	1.73	1.83	1.90	8.28
43. ENGINES & TURBINES	0.06	0.07	0.07	0.08	0.08	0.09	7.72
45. CONSTR. & MINING MACHINERY	0.02	0.02	0.02	0.02	0.02	0.03	7.25
46. MATERIALS HANDLING MACH. & EQ.	0.03	0.04	0.04	0.04	0.05	0.05	9.12
47. METALWORKING MACH. & EQ.	0.12	0.13	0.15	0.16	0.18	0.18	9.36
48. SPECIAL INDUSTRY MACHINERY	0.01	0.01	0.02	0.02	0.02	0.02	12.07
49. GENERAL INDUSTRY MACHINERY	0.13	0.15	0.16	0.17	0.18	0.19	7.51
50. MISC. NONELECTRICAL MACH.	0.04	0.04	0.05	0.05	0.05	0.05	7.53
51. OFFICE,COMPUTING & ACCT. MACH.	1.37	1.55	1.66	1.77	1.82	1.86	6.31
52. SERVICE INDUSTRY MACHINES	0.06	0.08	0.08	0.10	0.11	0.12	13.37
53. ELECTRICAL MACHINERY	0.90	1.03	1.13	1.24	1.34	1.40	9.13
55. ELECTRIC LIGHTING & WIRING EQ.	0.18	0.20	0.22	0.24	0.25	0.26	8.25
56. RADIO,TV, & COMMUNICATION EQ.	16.27	18.63	20.38	22.00	23.06	23.48	7.60
57. ELECTRONIC COMPONENTS & ACCESS.	9.18	10.93	12.31	13.76	15.01	15.73	11.37
58. MISC. ELECTRICAL MACH. & EQ.	0.17	0.19	0.21	0.23	0.25	0.26	9.57
59. MOTOR VEHICLES & EQUIPMENT	0.01	0.02	0.02	0.02	0.03	0.03	17.16
60. AIRCRAFT & PARTS	3.79	4.29	4.72	5.21	5.58	5.72	8.59
61. OTHER TRANSPORTATION EQ.	0.21	0.22	0.23	0.23	0.24	0.25	3.14
62. INSTRUMENTS & SUPPLIES	3.20	3.61	3.93	4.30	4.57	4.72	8.07
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.22	0.24	0.26	0.29	0.31	0.33	8.58
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.07	0.07	0.08	0.08	0.08	0.08	5.23
TOTAL, ALL INDUSTRIES	37.33	42.96	47.31	51.74	55.06	56.76	8.74
TOTAL EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	2.12	2.17	2.22	2.28	2.32	2.35	2.15
43. ENGINES & TURBINES	0.72	0.74	0.77	0.78	0.78	0.78	1.78
45. CONSTR. & MINING MACHINERY	1.51	1.60	1.68	1.74	1.79	1.81	3.65
46. MATERIALS HANDLING MACH. & EQ.	0.54	0.56	0.59	0.62	0.63	0.65	3.63
47. METALWORKING MACH. & EQ.	2.28	2.37	2.51	2.61	2.69	2.74	3.76
48. SPECIAL INDUSTRY MACHINERY	1.64	1.67	1.75	1.83	1.88	1.92	3.22
49. GENERAL INDUSTRY MACHINERY	3.00	3.07	3.22	3.30	3.36	3.41	2.62
50. MISC. NONELECTRICAL MACH.	0.33	0.34	0.35	0.36	0.36	0.37	2.23
51. OFFICE,COMPUTING & ACCT. MACH.	36.29	37.33	38.52	38.85	39.05	39.60	1.76
52. SERVICE INDUSTRY MACHINES	3.57	3.71	3.89	3.96	3.96	3.97	2.10
53. ELECTRICAL MACHINERY	18.15	18.47	19.30	19.75	19.97	20.12	2.08
55. ELECTRIC LIGHTING & WIRING EQ.	3.73	3.76	3.86	3.95	4.01	4.06	1.70

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
122. ELECTRICAL&ELECTRONIC ASSEMBLERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
56. RADIO,TV, & COMMUNICATION EQ.	38.54	39.25	40.29	40.79	40.98	41.48	1.48
57. ELECTRONIC COMPONENTS & ACCESS.	41.92	43.72	45.90	47.75	49.12	50.15	3.65
58. MISC. ELECTRICAL MACH. & EQ.	6.11	6.32	6.57	6.65	6.73	6.79	2.12
59. MOTOR VEHICLES & EQUIPMENT	0.70	0.73	0.75	0.76	0.77	0.78	2.24
60. AIRCRAFT & PARTS	7.59	7.90	8.11	8.37	8.39	8.38	2.00
61. OTHER TRANSPORTATION EQ.	0.73	0.75	0.77	0.79	0.79	0.80	1.73
62. INSTRUMENTS & SUPPLIES	27.53	27.97	29.03	30.11	30.86	31.33	2.62
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	4.99	5.07	5.29	5.52	5.71	5.85	3.22
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.36	0.37	0.38	0.39	0.40	0.40	2.39
TOTAL, ALL INDUSTRIES	203.42	208.96	216.90	222.35	225.75	228.94	2.39

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
123. ELECRO-MECHANICAL EQUIP. ASSEMB.
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	0.52	0.60	0.66	0.72	0.76	0.80	8.73
43. ENGINES & TURBINES	0.03	0.03	0.04	0.04	0.04	0.04	7.70
45. CONSTR. & MINING MACHINERY	0.02	0.02	0.02	0.02	0.02	0.02	7.24
46. MATERIALS HANDLING MACH. & EQ.	0.03	0.03	0.04	0.04	0.04	0.05	9.12
47. METALWORKING MACH. & EQ.	0.09	0.11	0.12	0.13	0.14	0.15	9.36
48. SPECIAL INDUSTRY MACHINERY	0.01	0.01	0.01	0.01	0.01	0.01	12.06
49. GENERAL INDUSTRY MACHINERY	0.13	0.14	0.15	0.17	0.18	0.18	7.52
50. MISC. NONELECTRICAL MACH.	0.18	0.19	0.21	0.23	0.25	0.25	7.54
51. OFFICE,COMPUTING & ACCT. MACH.	0.23	0.27	0.29	0.31	0.32	0.33	7.32
52. SERVICE INDUSTRY MACHINES	0.03	0.04	0.04	0.05	0.05	0.06	13.36
53. ELECTRICAL MACHINERY	0.14	0.15	0.17	0.19	0.20	0.21	8.98
55. ELECTRIC LIGHTING & WIRING EQ.	0.06	0.07	0.08	0.08	0.09	0.09	8.25
56. RADIO,TV, & COMMUNICATION EQ.	1.96	2.25	2.48	2.69	2.84	2.90	8.20
57. ELECTRONIC COMPONENTS & ACCESS.	0.99	1.17	1.32	1.48	1.61	1.69	11.37
58. MISC. ELECTRICAL MACH. & EQ.	0.03	0.04	0.04	0.04	0.05	0.05	9.57
59. MOTOR VEHICLES & EQUIPMENT	0.03	0.04	0.04	0.05	0.06	0.07	17.14
60. AIRCRAFT & PARTS	1.88	2.13	2.35	2.59	2.77	2.85	8.59
61. OTHER TRANSPORTATION EQ.	0.38	0.40	0.42	0.43	0.44	0.45	3.23
62. INSTRUMENTS & SUPPLIES	1.21	1.36	1.48	1.62	1.73	1.78	8.08
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.03	0.04	0.04	0.05	0.05	0.05	8.59
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.03	0.03	0.03	0.03	0.04	0.04	5.35
TOTAL, ALL INDUSTRIES	8.02	9.13	10.02	10.96	11.68	12.08	8.54
TOTAL EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	0.87	0.89	0.92	0.95	0.97	0.98	2.58
43. ENGINES & TURBINES	0.35	0.36	0.37	0.38	0.38	0.38	1.76
45. CONSTR. & MINING MACHINERY	1.48	1.56	1.64	1.70	1.74	1.76	3.64
46. MATERIALS HANDLING MACH. & EQ.	0.53	0.54	0.58	0.60	0.62	0.63	3.62
47. METALWORKING MACH. & EQ.	1.83	1.91	2.02	2.10	2.16	2.20	3.76
48. SPECIAL INDUSTRY MACHINERY	0.84	0.86	0.90	0.94	0.97	0.99	3.22
49. GENERAL INDUSTRY MACHINERY	2.90	2.98	3.12	3.20	3.25	3.31	2.62
50. MISC. NONELECTRICAL MACH.	1.54	1.58	1.64	1.68	1.70	1.72	2.23
51. OFFICE,COMPUTING & ACCT. MACH.	6.16	6.40	6.67	6.79	6.89	7.04	2.72
52. SERVICE INDUSTRY MACHINES	1.78	1.85	1.94	1.97	1.97	1.97	2.10
53. ELECTRICAL MACHINERY	2.72	2.76	2.88	2.95	2.97	2.99	1.93
55. ELECTRIC LIGHTING & WIRING EQ.	1.30	1.31	1.34	1.37	1.40	1.41	1.70

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
123. ELECRO-MECHANICAL EQUIP. ASSEMB.
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
56. RADIO,TV, & COMMUNICATION EQ.	4.63	4.75	4.90	4.99	5.04	5.13	2.05
57. ELECTRONIC COMPONENTS & ACCESS.	4.50	4.69	4.93	5.13	5.27	5.38	3.65
58. MISC. ELECTRICAL MACH. & EQ.	1.18	1.22	1.27	1.29	1.30	1.31	2.12
59. MOTOR VEHICLES & EQUIPMENT	1.53	1.60	1.65	1.68	1.69	1.70	2.23
60. AIRCRAFT & PARTS	3.78	3.93	4.03	4.16	4.17	4.17	2.00
61. OTHER TRANSPORTATION EQ.	1.33	1.36	1.41	1.44	1.44	1.45	1.82
62. INSTRUMENTS & SUPPLIES	10.39	10.56	10.96	11.37	11.65	11.83	2.62
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.80	0.81	0.84	0.88	0.91	0.93	3.22
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.16	0.17	0.18	0.18	0.18	0.19	2.59
TOTAL, ALL INDUSTRIES	51.67	53.20	55.36	56.93	57.89	58.71	2.59

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
124. INSTRUMENT MAKERS&ASSEMBLERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
53. ELECTRICAL MACHINERY	0.05	0.06	0.06	0.07	0.07	0.08	9.05
55. ELECTRIC LIGHTING & WIRING EQ.	0.01	0.01	0.01	0.01	0.01	0.01	8.27
56. RADIO,TV, & COMMUNICATION EQ.	0.39	0.45	0.50	0.54	0.57	0.58	8.30
57. ELECTRONIC COMPONENTS & ACCESS.	0.20	0.24	0.27	0.30	0.33	0.35	11.36
58. MISC. ELECTRICAL MACH. & EQ.	0.02	0.02	0.03	0.03	0.03	0.03	9.57
62. INSTRUMENTS & SUPPLIES	2.14	2.41	2.63	2.88	3.06	3.17	8.19
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.05	0.05	0.06	0.06	0.07	0.07	8.76
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.03	0.03	0.03	0.03	0.03	0.03	5.61
TOTAL, ALL INDUSTRIES	2.89	3.27	3.59	3.93	4.18	4.33	8.45
TOTAL EMPLOYMENT							
53. ELECTRICAL MACHINERY	1.01	1.03	1.08	1.10	1.11	1.12	2.00
55. ELECTRIC LIGHTING & WIRING EQ.	0.19	0.19	0.20	0.20	0.21	0.21	1.71
56. RADIO,TV, & COMMUNICATION EQ.	0.93	0.95	0.98	1.00	1.01	1.03	2.14
57. ELECTRONIC COMPONENTS & ACCESS.	0.92	0.96	1.01	1.05	1.08	1.10	3.64
58. MISC. ELECTRICAL MACH. & EQ.	0.77	0.80	0.83	0.84	0.85	0.85	2.12
62. INSTRUMENTS & SUPPLIES	18.37	18.68	19.41	20.16	20.68	21.01	2.73
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	1.13	1.15	1.20	1.25	1.30	1.33	3.38
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.14	0.14	0.15	0.15	0.16	0.16	2.71
TOTAL, ALL INDUSTRIES	23.73	24.18	25.14	26.05	26.70	27.13	2.71

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
125. MACHINE ASSEMBLERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	0.27	0.30	0.34	0.37	0.39	0.41	9.32
43. ENGINES & TURBINES	0.42	0.48	0.52	0.55	0.58	0.61	7.72
44. FARM & GARDEN MACHINERY	0.02	0.02	0.02	0.02	0.02	0.02	8.11
45. CONSTR. & MINING MACHINERY	0.12	0.13	0.14	0.16	0.16	0.17	7.24
46. MATERIALS HANDLING MACH. & EQ.	0.21	0.24	0.26	0.28	0.30	0.32	9.12
47. METALWORKING MACH. & EQ.	0.44	0.50	0.55	0.61	0.66	0.69	9.36
48. SPECIAL INDUSTRY MACHINERY	0.05	0.06	0.07	0.08	0.09	0.10	12.06
49. GENERAL INDUSTRY MACHINERY	0.35	0.39	0.42	0.46	0.48	0.50	7.51
50. MISC. NONELECTRICAL MACH.	0.29	0.31	0.34	0.38	0.40	0.41	7.54
51. OFFICE,COMPUTING & ACCT. MACH.	0.26	0.29	0.32	0.34	0.36	0.37	7.32
52. SERVICE INDUSTRY MACHINES	0.06	0.06	0.07	0.08	0.09	0.10	13.37
53. ELECTRICAL MACHINERY	0.31	0.35	0.38	0.42	0.45	0.47	8.94
54. HOUSEHOLD APPLIANCES	0.01	0.01	0.01	0.01	0.01	0.01	9.51
55. ELECTRIC LIGHTING & WIRING EQ.	0.10	0.11	0.12	0.13	0.14	0.15	8.25
56. RADIO,TV, & COMMUNICATION EQ.	0.42	0.48	0.53	0.58	0.61	0.62	8.17
57. ELECTRONIC COMPONENTS & ACCESS.	0.16	0.19	0.21	0.23	0.25	0.27	11.35
58. MISC. ELECTRICAL MACH. & EQ.	0.09	0.11	0.11	0.13	0.14	0.14	9.57
59. MOTOR VEHICLES & EQUIPMENT	0.10	0.12	0.13	0.16	0.19	0.22	17.14
60. AIRCRAFT & PARTS	1.63	1.84	2.03	2.24	2.39	2.45	8.60
61. OTHER TRANSPORTATION EQ.	0.39	0.41	0.43	0.44	0.46	0.47	3.88
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.13	0.14	0.15	0.16	0.17	0.17	6.09
TOTAL, ALL INDUSTRIES	5.79	6.55	7.17	7.83	8.36	8.68	8.43
TOTAL EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	0.44	0.46	0.47	0.49	0.50	0.51	3.13
43. ENGINES & TURBINES	5.06	5.22	5.41	5.47	5.50	5.52	1.78
44. FARM & GARDEN MACHINERY	4.64	4.76	5.00	5.07	5.13	5.19	2.27
45. CONSTR. & MINING MACHINERY	10.12	10.70	11.26	11.66	11.97	12.11	3.64
46. MATERIALS HANDLING MACH. & EQ.	3.62	3.73	3.96	4.12	4.23	4.32	3.62
47. METALWORKING MACH. & EQ.	8.51	8.85	9.38	9.76	10.04	10.23	3.76
48. SPECIAL INDUSTRY MACHINERY	7.52	7.68	8.06	8.42	8.63	8.81	3.21
49. GENERAL INDUSTRY MACHINERY	8.01	8.21	8.59	8.82	8.97	9.12	2.62
50. MISC. NONELECTRICAL MACH.	2.51	2.57	2.68	2.74	2.76	2.80	2.23
51. OFFICE,COMPUTING & ACCT. MACH.	6.82	7.09	7.39	7.52	7.63	7.80	2.72
52. SERVICE INDUSTRY MACHINES	3.09	3.21	3.37	3.42	3.43	3.43	2.11
53. ELECTRICAL MACHINERY	6.19	6.29	6.56	6.70	6.76	6.80	1.90

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
125. MACHINE ASSEMBLERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
54. HOUSEHOLD APPLIANCES	2.08	2.14	2.20	2.27	2.32	2.35	2.49
55. ELECTRIC LIGHTING & WIRING EQ.	2.06	2.08	2.13	2.19	2.22	2.25	1.70
56. RADIO,TV, & COMMUNICATION EQ.	1.00	1.02	1.05	1.07	1.08	1.10	2.02
57. ELECTRONIC COMPONENTS & ACCESS.	0.71	0.74	0.78	0.81	0.83	0.85	3.63
58. MISC. ELECTRICAL MACH. & EQ.	3.37	3.48	3.62	3.66	3.71	3.74	2.12
59. MOTOR VEHICLES & EQUIPMENT	5.11	5.35	5.53	5.62	5.68	5.71	2.23
60. AIRCRAFT & PARTS	3.26	3.39	3.48	3.59	3.60	3.59	2.00
61. OTHER TRANSPORTATION EQ.	1.34	1.39	1.45	1.49	1.50	1.52	2.46
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	1.68	1.74	1.82	1.87	1.90	1.93	2.73
TOTAL, ALL INDUSTRIES	87.15	90.11	94.21	96.78	98.42	99.69	2.73

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE
BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
126. ASSEMBLERS, NEC
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	17.67	20.11	22.05	23.97	25.43	26.53	8.46
20. LUMBER & WOOD PRODUCTS	0.90	1.04	1.15	1.28	1.42	1.54	11.45
21. WOOD CONTAINERS	0.28	0.32	0.35	0.39	0.42	0.44	9.83
22. HOUSEHOLD FURNITURE	0.18	0.20	0.21	0.22	0.22	0.22	3.70
23. OTHER FURNITURE & FIXTURES	0.34	0.35	0.36	0.38	0.40	0.42	4.40
24. PAPER & ALLIED PRODUCTS	0.17	0.19	0.21	0.22	0.24	0.25	7.32
25. PAPERBOARD CONTAINERS & BOXES	0.12	0.13	0.14	0.16	0.17	0.18	8.78
32. RUBBER & MISC. PLASTICS PROD.	1.05	1.19	1.33	1.50	1.64	1.74	10.49
34. FOOTWEAR & OTHER LEATHER PROD.	0.02	0.02	0.02	0.03	0.03	0.03	7.26
35. GLASS & GLASS PRODUCTS	0.10	0.12	0.14	0.15	0.17	0.19	12.60
36. STONE & CLAY PRODUCTS	0.19	0.21	0.23	0.25	0.26	0.28	8.29
37. PRIMARY FERROUS METALS	0.11	0.12	0.13	0.14	0.15	0.16	8.18
38. NONFERROUS METALS	0.46	0.53	0.58	0.64	0.69	0.72	9.52
39. METAL CONTAINERS	0.07	0.08	0.08	0.09	0.10	0.10	6.60
40. FAB. STRUCTURAL METAL PRODUCTS	2.95	3.32	3.55	3.83	4.07	4.29	7.81
41. SCREW MACHINE PROD.&STAMPINGS	0.91	1.02	1.09	1.19	1.27	1.32	7.69
42. OTHER FAB. METAL PRODUCTS	1.25	1.44	1.58	1.76	1.91	2.02	10.00
43. ENGINES & TURBINES	0.20	0.23	0.25	0.27	0.28	0.30	7.71
44. FARM & GARDEN MACHINERY	0.05	0.06	0.07	0.07	0.08	0.08	8.11
45. CONSTR. & MINING MACHINERY	0.11	0.12	0.13	0.14	0.15	0.16	7.24
46. MATERIALS HANDLING MACH. & EQ.	0.19	0.22	0.24	0.26	0.28	0.30	9.12
47. METALWORKING MACH. & EQ.	0.48	0.55	0.60	0.67	0.71	0.75	9.36
48. SPECIAL INDUSTRY MACHINERY	0.04	0.05	0.06	0.07	0.07	0.08	12.06
49. GENERAL INDUSTRY MACHINERY	0.74	0.83	0.89	0.96	1.02	1.06	7.51
50. MISC. NONELECTRICAL MACH.	1.02	1.11	1.22	1.34	1.42	1.46	7.54
51. OFFICE,COMPUTING & ACCT. MACH.	1.03	1.17	1.26	1.34	1.38	1.41	6.52
52. SERVICE INDUSTRY MACHINES	0.56	0.65	0.71	0.82	0.93	1.04	13.37
53. ELECTRICAL MACHINERY	2.07	2.37	2.59	2.84	3.05	3.19	8.97
54. HOUSEHOLD APPLIANCES	0.10	0.12	0.13	0.14	0.15	0.16	9.51
55. ELECTRIC LIGHTING & WIRING EQ.	1.93	2.18	2.33	2.56	2.75	2.87	8.25
56. RADIO,TV, & COMMUNICATION EQ.	26.83	30.63	33.41	35.98	37.61	38.20	7.32
57. ELECTRONIC COMPONENTS & ACCESS.	19.15	22.74	25.55	28.51	31.04	32.46	11.13
58. MISC. ELECTRICAL MACH. & EQ.	1.18	1.37	1.49	1.64	1.78	1.87	9.57
59. MOTOR VEHICLES & EQUIPMENT	3.64	4.34	4.93	5.86	6.86	8.02	17.14
60. AIRCRAFT & PARTS	9.04	10.18	11.16	12.26	13.05	13.34	8.09
61. OTHER TRANSPORTATION EQ.	3.30	3.49	3.62	3.70	3.83	3.96	3.71
62. INSTRUMENTS & SUPPLIES	6.63	7.47	8.14	8.91	9.48	9.81	8.14

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
126. ASSEMBLERS, NEC
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.76	0.84	0.91	1.00	1.09	1.15	8.49
64. MISC. MANUFACTURING	0.60	0.66	0.70	0.76	0.80	0.82	6.49
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.39	0.43	0.46	0.49	0.50	0.51	5.48
82. GOVERNMENT INDUSTRY	0.38	0.37	0.38	0.39	0.40	0.40	0.82
TOTAL, ALL INDUSTRIES	107.22	122.55	134.44	147.16	157.32	163.80	8.85
TOTAL EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	29.24	30.09	30.80	31.69	32.29	32.80	2.33
20. LUMBER & WOOD PRODUCTS	43.33	48.08	51.11	54.23	55.97	56.63	5.50
21. WOOD CONTAINERS	4.67	4.66	4.75	4.87	4.92	4.95	1.17
22. HOUSEHOLD FURNITURE	31.78	33.52	34.62	35.78	36.56	36.90	3.03
23. OTHER FURNITURE & FIXTURES	21.34	21.44	22.06	22.67	23.11	23.54	1.98
24. PAPER & ALLIED PRODUCTS	9.33	9.67	9.83	9.93	9.98	10.02	1.45
25. PAPERBOARD CONTAINERS & BOXES	5.27	5.41	5.53	5.64	5.70	5.73	1.72
32. RUBBER & MISC. PLASTICS PROD.	38.72	40.11	41.87	43.31	44.48	45.00	3.05
34. FOOTWEAR & OTHER LEATHER PROD.	7.61	7.77	7.96	8.08	8.17	8.26	1.66
35. GLASS & GLASS PRODUCTS	4.69	4.94	5.19	5.38	5.51	5.61	3.63
36. STONE & CLAY PRODUCTS	5.75	5.86	5.96	6.11	6.13	6.06	1.05
37. PRIMARY FERROUS METALS	1.50	1.55	1.61	1.63	1.64	1.64	1.79
38. NONFERROUS METALS	5.42	5.63	5.87	6.05	6.16	6.26	2.92
39. METAL CONTAINERS	4.92	4.86	4.87	4.95	4.98	5.01	0.35
40. FAB. STRUCTURAL METAL PRODUCTS	66.03	66.31	68.06	70.45	72.07	73.15	2.07
41. SCREW MACHINE PROD.&STAMPINGS	14.83	15.58	16.08	16.36	16.44	16.50	2.16
42. OTHER FAB. METAL PRODUCTS	27.26	28.18	29.50	30.49	31.25	32.03	3.28
43. ENGINES & TURBINES	2.45	2.53	2.62	2.65	2.67	2.68	1.77
44. FARM & GARDEN MACHINERY	16.63	17.07	17.95	18.19	18.40	18.60	2.27
45. CONSTR. & MINING MACHINERY	9.39	9.93	10.45	10.82	11.11	11.23	3.64
46. MATERIALS HANDLING MACH. & EQ.	3.36	3.46	3.67	3.83	3.93	4.01	3.62
47. METALWORKING MACH. & EQ.	9.26	9.64	10.21	10.63	10.93	11.14	3.76
48. SPECIAL INDUSTRY MACHINERY	6.21	6.34	6.66	6.96	7.13	7.28	3.22
49. GENERAL INDUSTRY MACHINERY	16.80	17.22	18.03	18.51	18.82	19.13	2.62
50. MISC. NONELECTRICAL MACH.	8.89	9.12	9.51	9.72	9.81	9.93	2.23
51. OFFICE,COMPUTING & ACCT. MACH.	27.34	28.19	29.14	29.45	29.66	30.13	1.96
52. SERVICE INDUSTRY MACHINES	30.71	31.92	33.44	33.98	34.06	34.07	2.10
53. ELECTRICAL MACHINERY	41.66	42.32	44.17	45.12	45.56	45.83	1.93
54. HOUSEHOLD APPLIANCES	41.22	42.35	43.50	44.98	45.96	46.59	2.48
55. ELECTRIC LIGHTING & WIRING EQ.	40.39	40.66	41.76	42.76	43.40	43.94	1.70
56. RADIO,TV, & COMMUNICATION EQ.	63.53	64.53	66.06	66.72	66.85	67.49	1.22

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
126. ASSEMBLERS, NEC
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
57. ELECTRONIC COMPONENTS & ACCESS.	87.43	90.97	95.28	98.93	101.54	103.47	3.43
58. MISC. ELECTRICAL MACH. & EQ.	43.72	45.24	47.04	47.58	48.18	48.56	2.12
59. MOTOR VEHICLES & EQUIPMENT	188.07	196.61	203.28	206.54	208.81	209.98	2.23
60. AIRCRAFT & PARTS	18.11	18.75	19.17	19.68	19.64	19.53	1.52
61. OTHER TRANSPORTATION EQ.	11.39	11.77	12.23	12.53	12.60	12.75	2.29
62. INSTRUMENTS & SUPPLIES	56.98	57.92	60.16	62.44	64.03	65.04	2.68
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	17.59	17.83	18.58	19.39	20.02	20.52	3.13
64. MISC. MANUFACTURING	54.39	55.48	57.54	59.43	60.63	61.33	2.43
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	4.02	4.15	4.30	4.42	4.50	4.55	2.49
82. GOVERNMENT INDUSTRY	0.43	0.43	0.44	0.45	0.46	0.47	1.93
TOTAL, ALL INDUSTRIES	1,121.73	1,158.16	1,200.92	1,233.42	1,254.14	1,268.41	2.49

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE
BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
127. METALWORKING OPERATIVES
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
1. LIVESTOCK & PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	2.61
2. OTHER AGRICULTURAL PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	2.76
5. IRON ORE MINING	0.09	0.10	0.11	0.12	0.12	0.12	7.84
6. NONFERROUS METAL MINING	0.07	0.09	0.10	0.11	0.12	0.13	11.42
7. COAL MINING	0.18	0.21	0.23	0.25	0.27	0.29	9.54
8. CRUDE PETROLEUM & N. GAS	0.25	0.26	0.27	0.29	0.30	0.30	4.12
9. STONE&CLAY MINING & QUARRYING	0.06	0.07	0.08	0.09	0.10	0.10	10.10
10. CHEM&FERTILIZER MIN. MINING	0.01	0.01	0.01	0.01	0.01	0.01	7.90
11. NEW CONSTRUCTION	1.18	1.33	1.43	1.58	1.70	1.79	8.71
13. ORDNANCE & ACCESSORIES	11.55	13.11	14.35	15.56	16.48	17.16	8.25
20. LUMBER & WOOD PRODUCTS	0.04	0.04	0.05	0.05	0.06	0.06	11.01
22. HOUSEHOLD FURNITURE	0.04	0.04	0.04	0.04	0.04	0.04	3.70
23. OTHER FURNITURE & FIXTURES	0.28	0.29	0.30	0.32	0.34	0.35	4.81
24. PAPER & ALLIED PRODUCTS	0.05	0.05	0.06	0.06	0.06	0.06	6.63
25. PAPERBOARD CONTAINERS & BOXES	0.02	0.02	0.02	0.02	0.03	0.03	8.78
27. CHEMICALS & PRODUCTS	0.14	0.16	0.17	0.19	0.20	0.21	7.99
28. PLASTICS & SYNTHETIC MATLS.	0.01	0.01	0.02	0.02	0.02	0.02	8.72
31. PET REFINING & REL. PROD.	0.09	0.10	0.10	0.11	0.12	0.12	5.17
32. RUBBER & MISC. PLASTICS PROD.	0.02	0.02	0.03	0.03	0.03	0.04	10.12
35. GLASS & GLASS PRODUCTS	0.03	0.03	0.04	0.04	0.05	0.05	11.76
36. STONE & CLAY PRODUCTS	0.23	0.26	0.28	0.31	0.33	0.34	8.32
37. PRIMARY FERROUS METALS	4.08	4.54	4.92	5.38	5.74	6.00	8.03
38. NONFERROUS METALS	3.25	3.71	4.06	4.46	4.78	4.98	8.92
39. METAL CONTAINERS	0.08	0.08	0.09	0.10	0.10	0.11	6.60
40. FAB. STRUCTURAL METAL PRODUCTS	5.71	6.42	6.85	7.37	7.81	8.23	7.58
41. SCREW MACHINE PROD.&STAMPINGS	5.37	5.99	6.42	6.99	7.40	7.69	7.44
42. OTHER FAB. METAL PRODUCTS	3.27	3.74	4.09	4.54	4.91	5.18	9.69
43. ENGINES & TURBINES	1.35	1.52	1.67	1.77	1.87	1.95	7.72
44. FARM & GARDEN MACHINERY	0.08	0.09	0.09	0.10	0.11	0.11	8.11
45. CONSTR. & MINING MACHINERY	0.71	0.80	0.86	0.93	0.98	1.01	7.24
46. MATERIALS HANDLING MACH. & EQ.	1.23	1.41	1.53	1.69	1.82	1.90	9.12
47. METALWORKING MACH. & EQ.	4.54	5.21	5.72	6.33	6.80	7.10	9.36
48. SPECIAL INDUSTRY MACHINERY	0.21	0.25	0.27	0.32	0.35	0.38	12.06
49. GENERAL INDUSTRY MACHINERY	2.60	2.91	3.13	3.37	3.58	3.73	7.51
50. MISC. NONELECTRICAL MACH.	9.76	10.62	11.68	12.82	13.64	14.07	7.60
51. OFFICE,COMPUTING & ACCT. MACH.	0.44	0.50	0.55	0.59	0.61	0.63	7.32
52. SERVICE INDUSTRY MACHINES	0.48	0.56	0.62	0.71	0.80	0.90	13.37

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
127. METALWORKING OPERATIVES
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
53. ELECTRICAL MACHINERY	1.58	1.81	1.98	2.18	2.34	2.45	9.10
54. HOUSEHOLD APPLIANCES	0.03	0.04	0.04	0.04	0.05	0.05	9.51
55. ELECTRIC LIGHTING & WIRING EQ.	0.77	0.87	0.93	1.02	1.10	1.14	8.25
56. RADIO,TV, & COMMUNICATION EQ.	6.91	7.95	8.74	9.47	9.97	10.20	8.08
57. ELECTRONIC COMPONENTS & ACCESS.	4.88	5.80	6.54	7.31	7.97	8.36	11.37
58. MISC. ELECTRICAL MACH. & EQ.	0.30	0.34	0.37	0.41	0.44	0.47	9.57
59. MOTOR VEHICLES & EQUIPMENT	2.62	3.13	3.55	4.22	4.94	5.78	17.14
60. AIRCRAFT & PARTS	27.51	31.12	34.29	37.84	40.47	41.54	8.59
61. OTHER TRANSPORTATION EQ.	13.60	14.34	14.79	15.09	15.56	16.03	3.34
62. INSTRUMENTS & SUPPLIES	3.55	4.00	4.37	4.78	5.10	5.28	8.24
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.44	0.48	0.52	0.57	0.62	0.66	8.53
64. MISC. MANUFACTURING	0.21	0.23	0.24	0.26	0.27	0.28	5.90
65. TRANSPORTATION & WAREHOUSING	0.36	0.37	0.38	0.40	0.41	0.42	3.26
68. UTILITIES	0.14	0.15	0.16	0.17	0.18	0.18	6.05
69. WHOLESALE & RETAIL TRADE	0.07	0.08	0.09	0.10	0.11	0.11	9.19
72. PERSONAL SERVICES EXC. AUTO.	0.76	0.88	1.00	1.13	1.24	1.34	12.10
73. BUSINESS SERVICES	0.07	0.08	0.09	0.10	0.10	0.11	9.63
75. AUTOMOBILE REPAIR & SERVICE	0.10	0.12	0.12	0.13	0.14	0.15	6.79
77. MISC. SERVICES	0.02	0.02	0.02	0.02	0.02	0.02	2.54
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	3.73	4.06	4.34	4.62	4.79	4.87	5.47
82. GOVERNMENT INDUSTRY	6.76	6.63	6.77	6.97	7.09	7.15	1.14
TOTAL, ALL INDUSTRIES	131.92	147.11	159.63	173.54	184.67	191.84	7.78
TOTAL EMPLOYMENT							
1. LIVESTOCK & PRODUCTS	1.05	1.06	1.05	1.03	1.02	1.01	-0.80
2. OTHER AGRICULTURAL PRODUCTS	7.62	7.65	7.68	7.65	7.64	7.63	0.02
5. IRON ORE MINING	1.68	1.80	1.92	1.90	1.86	1.82	1.68
6. NONFERROUS METAL MINING	1.27	1.35	1.41	1.45	1.45	1.46	2.81
7. COAL MINING	6.46	6.83	7.12	7.33	7.60	7.79	3.82
8. CRUDE PETROLEUM & N. GAS	3.36	3.35	3.34	3.28	3.23	3.25	-0.66
9. STONE&CLAY MINING & QUARRYING	2.03	2.07	2.14	2.24	2.29	2.31	2.69
10. CHEM&FERTILIZER MIN. MINING	0.44	0.45	0.47	0.48	0.48	0.48	2.00
11. NEW CONSTRUCTION	31.31	31.99	32.65	33.71	34.54	35.04	2.28
13. ORDNANCE & ACCESSORIES	19.10	19.61	20.03	20.58	20.92	21.22	2.12
20. LUMBER & WOOD PRODUCTS	1.79	1.97	2.09	2.21	2.27	2.29	5.08
22. HOUSEHOLD FURNITURE	6.33	6.68	6.89	7.13	7.28	7.35	3.03
23. OTHER FURNITURE & FIXTURES	17.67	17.83	18.42	19.01	19.44	19.87	2.38
24. PAPER & ALLIED PRODUCTS	2.50	2.57	2.60	2.60	2.60	2.60	0.80

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
127. METALWORKING OPERATIVES
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
25. PAPERBOARD CONTAINERS & BOXES	0.83	0.85	0.87	0.89	0.90	0.90	1.72
27. CHEMICALS & PRODUCTS	3.00	3.07	3.13	3.17	3.20	3.23	1.45
28. PLASTICS & SYNTHETIC MATLS.	0.54	0.56	0.58	0.59	0.60	0.60	2.32
31. PET REFINING & REL. PROD.	1.74	1.74	1.75	1.76	1.77	1.76	0.23
32. RUBBER & MISC. PLASTICS PROD.	0.80	0.83	0.86	0.89	0.91	0.92	2.70
35. GLASS & GLASS PRODUCTS	1.28	1.33	1.39	1.43	1.46	1.47	2.87
36. STONE & CLAY PRODUCTS	7.10	7.24	7.37	7.55	7.58	7.49	1.08
37. PRIMARY FERROUS METALS	57.20	59.06	61.03	61.90	62.23	62.06	1.65
38. NONFERROUS METALS	38.40	39.67	41.12	42.17	42.69	43.13	2.35
39. METAL CONTAINERS	5.28	5.20	5.21	5.31	5.34	5.37	0.35
40. FAB. STRUCTURAL METAL PRODUCTS	127.91	128.15	131.23	135.5[illegible]	138.39	140.18	1.85
41. SCREW MACHINE PROD.&STAMPINGS	87.54	91.76	94.49	95.86	96.13	96.29	1.92
42. OTHER FAB. METAL PRODUCTS	71.00	73.17	76.36	78.72	80.45	82.26	2.99
43. ENGINES & TURBINES	16.19	16.71	17.33	17.52	17.61	17.68	1.78
44. FARM & GARDEN MACHINERY	23.54	24.16	25.41	25.76	26.05	26.34	2.27
45. CONSTR. & MINING MACHINERY	60.37	63.82	67.16	69.54	71.40	72.20	3.64
46. MATERIALS HANDLING MACH. & EQ.	21.58	22.27	23.62	24.59	25.26	25.79	3.62
47. METALWORKING MACH. & EQ.	88.18	91.76	97.21	101.16	104.08	106.04	3.76
48. SPECIAL INDUSTRY MACHINERY	29.62	30.25	31.76	33.18	34.00	34.71	3.22
49. GENERAL INDUSTRY MACHINERY	59.16	60.63	63.48	65.16	66.27	67.33	2.62
50. MISC. NONELECTRICAL MACH.	85.20	87.48	91.23	93.35	94.26	95.42	2.29
51. OFFICE,COMPUTING & ACCT. MACH.	11.67	12.14	12.65	12.88	13.06	13.35	2.72
52. SERVICE INDUSTRY MACHINES	26.59	27.64	28.96	29.43	29.50	29.51	2.10
53. ELECTRICAL MACHINERY	31.81	32.36	33.82	34.59	34.96	35.21	2.05
54. HOUSEHOLD APPLIANCES	13.19	13.55	13.92	14.39	14.70	14.91	2.48
55. ELECTRIC LIGHTING & WIRING EQ.	16.12	16.22	16.66	17.06	17.32	17.53	1.70
56. RADIO,TV, & COMMUNICATION EQ.	16.37	16.75	17.27	17.57	17.72	18.01	1.93
57. ELECTRONIC COMPONENTS & ACCESS.	22.27	23.22	24.37	25.36	26.09	26.63	3.65
58. MISC. ELECTRICAL MACH. & EQ.	10.91	11.28	11.73	11.87	12.02	12.11	2.12
59. MOTOR VEHICLES & EQUIPMENT	135.39	141.54	146.34	148.69	150.32	151.17	2.23
60. AIRCRAFT & PARTS	55.11	57.31	58.88	60.73	60.87	60.83	2.00
61. OTHER TRANSPORTATION EQ.	46.95	48.33	50.03	51.11	51.22	51.65	1.93
62. INSTRUMENTS & SUPPLIES	30.52	31.05	32.28	33.54	34.43	35.00	2.78
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	10.05	10.19	10.62	11.09	11.45	11.74	3.17
64. MISC. MANUFACTURING	18.71	18.98	19.57	20.10	20.39	20.53	1.87
65. TRANSPORTATION & WAREHOUSING	8.36	8.46	8.54	8.65	8.61	8.52	0.37
68. UTILITIES	6.40	6.41	6.42	6.42	6.43	6.43	0.10
69. WHOLESALE & RETAIL TRADE	11.81	12.14	12.47	12.74	12.94	13.15	2.18
72. PERSONAL SERVICES EXC. AUTO.	41.29	43.60	46.10	48.62	51.16	53.58	5.35

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
127. METALWORKING OPERATIVES
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
73. BUSINESS SERVICES	1.41	1.47	1.54	1.61	1.68	1.74	4.18
75. AUTOMOBILE REPAIR & SERVICE	7.21	7.31	7.34	7.35	7.36	7.39	0.51
77. MISC. SERVICES	2.73	2.73	2.73	2.75	2.78	2.82	0.61
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	39.50	40.71	42.23	43.35	44.05	44.58	2.45
82. GOVERNMENT INDUSTRY	18.26	18.19	18.32	18.59	18.87	19.12	0.92
TOTAL, ALL INDUSTRIES	1,473.80	1,518.64	1,575.36	1,617.30	1,643.33	1,663.01	2.45

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
128. DRILL PRESS&BORING MACH. OPER.
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	1.09	1.23	1.35	1.46	1.54	1.60	8.03
23. OTHER FURNITURE & FIXTURES	0.01	0.01	0.01	0.01	0.01	0.01	4.73
36. STONE & CLAY PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	8.34
37. PRIMARY FERROUS METALS	0.09	0.10	0.11	0.12	0.13	0.13	8.57
38. NONFERROUS METALS	0.18	0.20	0.22	0.24	0.26	0.27	8.53
40. FAB. STRUCTURAL METAL PRODUCTS	0.39	0.44	0.47	0.51	0.54	0.58	8.09
41. SCREW MACHINE PROD.&STAMPINGS	0.35	0.39	0.42	0.46	0.49	0.51	7.76
42. OTHER FAB. METAL PRODUCTS	0.24	0.27	0.30	0.34	0.36	0.39	10.04
43. ENGINES & TURBINES	0.31	0.35	0.38	0.41	0.43	0.45	7.72
44. FARM & GARDEN MACHINERY	0.01	0.01	0.01	0.01	0.01	0.01	8.11
45. CONSTR. & MINING MACHINERY	0.07	0.07	0.08	0.09	0.09	0.10	7.24
46. MATERIALS HANDLING MACH. & EQ.	0.12	0.13	0.14	0.16	0.17	0.18	9.12
47. METALWORKING MACH. & EQ.	0.48	0.55	0.60	0.67	0.72	0.75	9.36
48. SPECIAL INDUSTRY MACHINERY	0.03	0.03	0.04	0.04	0.05	0.05	12.06
49. GENERAL INDUSTRY MACHINERY	0.30	0.33	0.36	0.38	0.41	0.42	7.51
50. MISC. NONELECTRICAL MACH.	0.89	0.96	1.06	1.16	1.24	1.27	7.54
51. OFFICE,COMPUTING & ACCT. MACH.	0.06	0.06	0.07	0.07	0.08	0.08	7.32
52. SERVICE INDUSTRY MACHINES	0.05	0.06	0.06	0.07	0.08	0.09	13.37
53. ELECTRICAL MACHINERY	0.20	0.23	0.25	0.28	0.30	0.31	9.17
55. ELECTRIC LIGHTING & WIRING EQ.	0.08	0.09	0.10	0.10	0.11	0.12	8.25
56. RADIO,TV, & COMMUNICATION EQ.	0.82	0.95	1.04	1.13	1.19	1.22	8.15
57. ELECTRONIC COMPONENTS & ACCESS.	0.38	0.46	0.51	0.58	0.63	0.66	11.37
58. MISC. ELECTRICAL MACH. & EQ.	0.02	0.02	0.03	0.03	0.03	0.03	9.58
59. MOTOR VEHICLES & EQUIPMENT	0.21	0.25	0.29	0.34	0.40	0.47	17.14
60. AIRCRAFT & PARTS	2.76	3.12	3.44	3.80	4.06	4.17	8.59
61. OTHER TRANSPORTATION EQ.	0.42	0.44	0.46	0.47	0.48	0.49	3.18
62. INSTRUMENTS & SUPPLIES	0.53	0.60	0.66	0.72	0.76	0.79	8.25
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.05	0.05	0.06	0.06	0.07	0.07	8.55
64. MISC. MANUFACTURING	0.01	0.02	0.02	0.02	0.02	0.02	5.95
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.02	0.03	0.03	0.03	0.03	0.03	5.80
TOTAL, ALL INDUSTRIES	10.17	11.49	12.58	13.77	14.71	15.29	8.50
TOTAL EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	1.80	1.84	1.88	1.93	1.96	1.98	1.91
23. OTHER FURNITURE & FIXTURES	0.58	0.59	0.61	0.63	0.64	0.66	2.30
36. STONE & CLAY PRODUCTS	0.31	0.32	0.32	0.33	0.33	0.33	1.10

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
128. DRILL PRESS&BORING MACH. OPER.
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
37. PRIMARY FERROUS METALS	1.22	1.27	1.32	1.34	1.36	1.36	2.15
38. NONFERROUS METALS	2.09	2.15	2.22	2.27	2.29	2.30	1.99
40. FAB. STRUCTURAL METAL PRODUCTS	8.74	8.80	9.05	9.40	9.64	9.81	2.33
41. SCREW MACHINE PROD.&STAMPINGS	5.71	6.00	6.20	6.31	6.35	6.37	2.23
42. OTHER FAB. METAL PRODUCTS	5.20	5.38	5.63	5.83	5.97	6.12	3.32
43. ENGINES & TURBINES	3.71	3.82	3.97	4.01	4.03	4.05	1.78
44. FARM & GARDEN MACHINERY	2.65	2.72	2.86	2.90	2.94	2.97	2.27
45. CONSTR. & MINING MACHINERY	5.66	5.99	6.30	6.52	6.70	6.77	3.64
46. MATERIALS HANDLING MACH. & EQ.	2.02	2.09	2.22	2.31	2.37	2.42	3.62
47. METALWORKING MACH. & EQ.	9.29	9.66	10.24	10.65	10.96	11.17	3.76
48. SPECIAL INDUSTRY MACHINERY	3.84	3.93	4.12	4.31	4.41	4.50	3.22
49. GENERAL INDUSTRY MACHINERY	6.74	6.90	7.23	7.42	7.55	7.67	2.62
50. MISC. NONELECTRICAL MACH.	7.74	7.94	8.27	8.46	8.54	8.64	2.23
51. OFFICE,COMPUTING & ACCT. MACH.	1.49	1.55	1.62	1.65	1.67	1.71	2.72
52. SERVICE INDUSTRY MACHINES	2.64	2.74	2.87	2.92	2.93	2.93	2.10
53. ELECTRICAL MACHINERY	4.07	4.14	4.33	4.43	4.48	4.51	2.11
55. ELECTRIC LIGHTING & WIRING EQ.	1.65	1.66	1.71	1.75	1.77	1.80	1.70
56. RADIO,TV, & COMMUNICATION EQ.	1.95	1.99	2.06	2.09	2.11	2.15	2.00
57. ELECTRONIC COMPONENTS & ACCESS.	1.75	1.83	1.92	2.00	2.05	2.10	3.65
58. MISC. ELECTRICAL MACH. & EQ.	0.78	0.81	0.84	0.85	0.86	0.87	2.13
59. MOTOR VEHICLES & EQUIPMENT	11.04	11.54	11.93	12.12	12.26	12.32	2.23
60. AIRCRAFT & PARTS	5.53	5.75	5.91	6.09	6.11	6.10	2.00
61. OTHER TRANSPORTATION EQ.	1.46	1.50	1.55	1.58	1.58	1.59	1.77
62. INSTRUMENTS & SUPPLIES	4.58	4.66	4.84	5.03	5.17	5.25	2.79
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	1.13	1.15	1.20	1.25	1.29	1.33	3.18
64. MISC. MANUFACTURING	1.29	1.31	1.35	1.39	1.41	1.42	1.92
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.23	0.23	0.24	0.25	0.25	0.26	2.59
TOTAL, ALL INDUSTRIES	108.06	111.49	116.06	119.31	121.29	122.79	2.59

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE
BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
129. ELECTROPLATORS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	0.08	0.09	0.10	0.11	0.11	0.12	7.31
37. PRIMARY FERROUS METALS	0.03	0.04	0.04	0.04	0.05	0.05	6.91
38. NONFERROUS METALS	0.08	0.09	0.10	0.11	0.11	0.12	9.45
40. FAB. STRUCTURAL METAL PRODUCTS	0.05	0.06	0.06	0.06	0.07	0.07	8.64
41. SCREW MACHINE PROD.&STAMPINGS	0.06	0.07	0.07	0.08	0.08	0.09	7.73
42. OTHER FAB. METAL PRODUCTS	0.62	0.70	0.76	0.83	0.89	0.94	8.75
43. ENGINES & TURBINES	0.01	0.01	0.01	0.01	0.01	0.01	7.80
47. METALWORKING MACH. & EQ.	0.01	0.01	0.01	0.02	0.02	0.02	9.35
50. MISC. NONELECTRICAL MACH.	0.05	0.05	0.06	0.06	0.07	0.07	7.53
51. OFFICE,COMPUTING & ACCT. MACH.	0.02	0.03	0.03	0.03	0.03	0.03	7.33
53. ELECTRICAL MACHINERY	0.02	0.02	0.02	0.02	0.03	0.03	8.88
55. ELECTRIC LIGHTING & WIRING EQ.	0.06	0.07	0.07	0.08	0.09	0.09	8.25
56. RADIO,TV, & COMMUNICATION EQ.	0.49	0.56	0.62	0.67	0.70	0.72	8.07
57. ELECTRONIC COMPONENTS & ACCESS.	1.30	1.54	1.74	1.94	2.12	2.22	11.37
58. MISC. ELECTRICAL MACH. & EQ.	0.01	0.01	0.01	0.01	0.01	0.01	9.58
59. MOTOR VEHICLES & EQUIPMENT	0.02	0.02	0.02	0.02	0.03	0.03	17.13
60. AIRCRAFT & PARTS	0.67	0.75	0.83	0.92	0.98	1.00	8.60
61. OTHER TRANSPORTATION EQ.	0.03	0.03	0.03	0.03	0.03	0.04	4.32
62. INSTRUMENTS & SUPPLIES	0.08	0.09	0.10	0.10	0.11	0.11	8.15
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.01	0.01	0.01	0.01	0.01	0.01	8.55
64. MISC. MANUFACTURING	0.01	0.01	0.01	0.02	0.02	0.02	8.59
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.05	0.05	0.06	0.06	0.06	0.06	5.08
82. GOVERNMENT INDUSTRY	0.93	0.91	0.93	0.95	0.96	0.97	0.84
TOTAL, ALL INDUSTRIES	4.67	5.23	5.69	6.21	6.62	6.85	7.94
TOTAL EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	0.13	0.14	0.14	0.14	0.14	0.14	1.24
37. PRIMARY FERROUS METALS	0.47	0.48	0.49	0.49	0.49	0.48	0.60
38. NONFERROUS METALS	0.90	0.94	0.98	1.01	1.03	1.04	2.85
40. FAB. STRUCTURAL METAL PRODUCTS	1.09	1.10	1.14	1.19	1.23	1.25	2.85
41. SCREW MACHINE PROD.&STAMPINGS	0.97	1.02	1.05	1.07	1.08	1.08	2.20
42. OTHER FAB. METAL PRODUCTS	13.38	13.66	14.13	14.44	14.64	14.85	2.11
43. ENGINES & TURBINES	0.07	0.07	0.08	0.08	0.08	0.08	1.86
47. METALWORKING MACH. & EQ.	0.22	0.22	0.24	0.25	0.25	0.26	3.75
50. MISC. NONELECTRICAL MACH.	0.43	0.44	0.46	0.47	0.47	0.48	2.22
51. OFFICE,COMPUTING & ACCT. MACH.	0.64	0.66	0.69	0.70	0.71	0.73	2.73

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
129. ELECTROPLATORS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
53. ELECTRICAL MACHINERY	0.35	0.36	0.37	0.38	0.38	0.38	1.84
55. ELECTRIC LIGHTING & WIRING EQ.	1.29	1.30	1.33	1.36	1.38	1.40	1.70
56. RADIO,TV, & COMMUNICATION EQ.	1.16	1.18	1.22	1.24	1.25	1.27	1.92
57. ELECTRONIC COMPONENTS & ACCESS.	5.92	6.17	6.48	6.74	6.94	7.08	3.65
58. MISC. ELECTRICAL MACH. & EQ.	0.22	0.22	0.23	0.23	0.24	0.24	2.13
59. MOTOR VEHICLES & EQUIPMENT	0.78	0.81	0.84	0.85	0.86	0.87	2.22
60. AIRCRAFT & PARTS	1.33	1.39	1.42	1.47	1.47	1.47	2.00
61. OTHER TRANSPORTATION EQ.	0.10	0.10	0.11	0.11	0.11	0.11	2.89
62. INSTRUMENTS & SUPPLIES	0.67	0.68	0.70	0.73	0.75	0.76	2.70
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.20	0.20	0.21	0.22	0.23	0.23	3.18
64. MISC. MANUFACTURING	1.10	1.15	1.22	1.28	1.33	1.37	4.46
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.34	0.35	0.37	0.38	0.38	0.39	2.47
82. GOVERNMENT INDUSTRY	1.67	1.67	1.68	1.72	1.75	1.77	1.11
TOTAL, ALL INDUSTRIES	34.35	35.28	36.57	37.58	38.23	38.80	2.47

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
130. GRINDING&ABRADING MACH. OPER.
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	0.99	1.12	1.23	1.33	1.40	1.46	7.98
23. OTHER FURNITURE & FIXTURES	0.01	0.01	0.01	0.01	0.02	0.02	4.64
36. STONE & CLAY PRODUCTS	0.01	0.01	0.01	0.01	0.02	0.02	8.28
37. PRIMARY FERROUS METALS	0.48	0.53	0.58	0.64	0.69	0.73	8.82
38. NONFERROUS METALS	0.29	0.33	0.36	0.39	0.42	0.43	8.62
40. FAB. STRUCTURAL METAL PRODUCTS	0.36	0.41	0.44	0.47	0.50	0.53	8.21
41. SCREW MACHINE PROD.&STAMPINGS	0.23	0.25	0.27	0.30	0.32	0.33	7.73
42. OTHER FAB. METAL PRODUCTS	0.35	0.40	0.44	0.48	0.52	0.54	9.19
43. ENGINES & TURBINES	0.18	0.20	0.22	0.23	0.25	0.26	7.72
45. CONSTR. & MINING MACHINERY	0.03	0.03	0.04	0.04	0.04	0.04	7.24
46. MATERIALS HANDLING MACH. & EQ.	0.05	0.06	0.06	0.07	0.08	0.08	9.12
47. METALWORKING MACH. & EQ.	0.84	0.97	1.06	1.17	1.26	1.32	9.36
48. SPECIAL INDUSTRY MACHINERY	0.02	0.02	0.02	0.02	0.03	0.03	12.06
49. GENERAL INDUSTRY MACHINERY	0.36	0.40	0.44	0.47	0.50	0.52	7.51
50. MISC. NONELECTRICAL MACH.	1.19	1.30	1.42	1.56	1.66	1.71	7.54
51. OFFICE,COMPUTING & ACCT. MACH.	0.03	0.03	0.04	0.04	0.04	0.04	7.33
52. SERVICE INDUSTRY MACHINES	0.02	0.03	0.03	0.04	0.04	0.05	13.38
53. ELECTRICAL MACHINERY	0.09	0.10	0.11	0.13	0.14	0.14	9.23
55. ELECTRIC LIGHTING & WIRING EQ.	0.04	0.05	0.05	0.06	0.06	0.07	8.25
56. RADIO,TV, & COMMUNICATION EQ.	0.35	0.40	0.44	0.48	0.51	0.52	8.02
57. ELECTRONIC COMPONENTS & ACCESS.	0.26	0.31	0.34	0.38	0.42	0.44	11.37
58. MISC. ELECTRICAL MACH. & EQ.	0.01	0.01	0.01	0.01	0.01	0.01	9.60
59. MOTOR VEHICLES & EQUIPMENT	0.21	0.25	0.29	0.34	0.40	0.47	17.14
60. AIRCRAFT & PARTS	3.35	3.79	4.17	4.60	4.92	5.06	8.59
61. OTHER TRANSPORTATION EQ.	0.18	0.19	0.19	0.20	0.20	0.21	3.10
62. INSTRUMENTS & SUPPLIES	0.28	0.31	0.34	0.38	0.40	0.42	8.49
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.04	0.05	0.05	0.05	0.06	0.06	8.50
64. MISC. MANUFACTURING	0.06	0.06	0.06	0.07	0.07	0.07	5.13
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.29	0.31	0.34	0.36	0.38	0.38	6.01
TOTAL, ALL INDUSTRIES	10.60	11.96	13.09	14.37	15.36	15.96	8.53
TOTAL EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	1.64	1.68	1.71	1.75	1.78	1.80	1.87
23. OTHER FURNITURE & FIXTURES	0.82	0.83	0.85	0.88	0.90	0.92	2.22
36. STONE & CLAY PRODUCTS	0.33	0.34	0.34	0.35	0.35	0.35	1.05
37. PRIMARY FERROUS METALS	6.67	6.95	7.23	7.39	7.48	7.51	2.40

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
130. GRINDING&ABRADING MACH. OPER.
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
38. NONFERROUS METALS	3.39	3.49	3.61	3.69	3.73	3.75	2.07
40. FAB. STRUCTURAL METAL PRODUCTS	8.04	8.10	8.35	8.68	8.91	9.07	2.44
41. SCREW MACHINE PROD.&STAMPINGS	3.71	3.90	4.03	4.10	4.12	4.14	2.20
42. OTHER FAB. METAL PRODUCTS	7.63	7.83	8.13	8.35	8.49	8.65	2.52
43. ENGINES & TURBINES	2.13	2.19	2.28	2.30	2.31	2.32	1.78
45. CONSTR. & MINING MACHINERY	2.55	2.69	2.83	2.94	3.01	3.05	3.64
46. MATERIALS HANDLING MACH. & EQ.	0.91	0.94	1.00	1.04	1.07	1.09	3.62
47. METALWORKING MACH. & EQ.	16.34	17.00	18.01	18.74	19.28	19.65	3.76
48. SPECIAL INDUSTRY MACHINERY	2.29	2.34	2.46	2.57	2.63	2.69	3.22
49. GENERAL INDUSTRY MACHINERY	8.22	8.42	8.82	9.05	9.21	9.35	2.62
50. MISC. NONELECTRICAL MACH.	10.40	10.67	11.12	11.37	11.47	11.61	2.23
51. OFFICE,COMPUTING & ACCT. MACH.	0.77	0.81	0.84	0.85	0.87	0.89	2.73
52. SERVICE INDUSTRY MACHINES	1.37	1.43	1.49	1.52	1.52	1.52	2.11
53. ELECTRICAL MACHINERY	1.84	1.87	1.96	2.01	2.03	2.05	2.17
55. ELECTRIC LIGHTING & WIRING EQ.	0.94	0.94	0.97	0.99	1.01	1.02	1.70
56. RADIO,TV, & COMMUNICATION EQ.	0.83	0.85	0.88	0.89	0.90	0.91	1.88
57. ELECTRONIC COMPONENTS & ACCESS.	1.17	1.22	1.28	1.33	1.37	1.40	3.65
58. MISC. ELECTRICAL MACH. & EQ.	0.29	0.30	0.31	0.31	0.32	0.32	2.14
59. MOTOR VEHICLES & EQUIPMENT	11.05	11.55	11.94	12.13	12.26	12.33	2.23
60. AIRCRAFT & PARTS	6.71	6.97	7.16	7.39	7.41	7.40	2.00
61. OTHER TRANSPORTATION EQ.	0.61	0.63	0.65	0.66	0.66	0.67	1.69
62. INSTRUMENTS & SUPPLIES	2.39	2.44	2.55	2.65	2.73	2.78	3.01
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.95	0.96	1.00	1.04	1.08	1.11	3.14
64. MISC. MANUFACTURING	5.01	5.04	5.16	5.27	5.30	5.30	1.13
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	2.86	2.95	3.07	3.16	3.21	3.25	2.55
TOTAL, ALL INDUSTRIES	114.15	117.71	122.49	125.92	127.97	129.47	2.55

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
131. HEATERS, METAL
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
37. PRIMARY FERROUS METALS	0.12	0.13	0.14	0.15	0.16	0.17	7.36
38. NONFERROUS METALS	0.06	0.06	0.07	0.08	0.08	0.09	9.11
40. FAB. STRUCTURAL METAL PRODUCTS	0.01	0.01	0.01	0.02	0.02	0.02	8.12
41. SCREW MACHINE PROD.&STAMPINGS	0.07	0.08	0.09	0.09	0.10	0.10	7.69
42. OTHER FAB. METAL PRODUCTS	0.01	0.01	0.01	0.02	0.02	0.02	10.12
56. RADIO,TV, & COMMUNICATION EQ.	0.01	0.01	0.01	0.01	0.01	0.01	7.21
59. MOTOR VEHICLES & EQUIPMENT	0.01	0.01	0.01	0.01	0.02	0.02	17.14
60. AIRCRAFT & PARTS	0.19	0.21	0.24	0.26	0.28	0.29	8.60
61. OTHER TRANSPORTATION EQ.	0.03	0.03	0.03	0.03	0.03	0.03	2.67
TOTAL, ALL INDUSTRIES	0.53	0.60	0.65	0.71	0.76	0.78	8.11
TOTAL EMPLOYMENT							
37. PRIMARY FERROUS METALS	1.66	1.71	1.75	1.77	1.77	1.75	1.02
38. NONFERROUS METALS	0.66	0.69	0.71	0.73	0.74	0.75	2.53
40. FAB. STRUCTURAL METAL PRODUCTS	0.27	0.27	0.28	0.29	0.30	0.30	2.36
41. SCREW MACHINE PROD.&STAMPINGS	1.18	1.24	1.28	1.30	1.31	1.31	2.16
42. OTHER FAB. METAL PRODUCTS	0.24	0.25	0.26	0.27	0.28	0.29	3.40
56. RADIO,TV, & COMMUNICATION EQ.	0.01	0.01	0.01	0.01	0.01	0.01	1.11
59. MOTOR VEHICLES & EQUIPMENT	0.44	0.46	0.48	0.49	0.49	0.49	2.23
60. AIRCRAFT & PARTS	0.38	0.39	0.40	0.42	0.42	0.42	2.00
61. OTHER TRANSPORTATION EQ.	0.11	0.11	0.11	0.11	0.11	0.11	1.27
TOTAL, ALL INDUSTRIES	5.57	5.76	5.95	6.07	6.11	6.14	1.96

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
132. LATHE MACHINE OPERATORS, METAL
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	1.09	1.23	1.34	1.45	1.52	1.58	7.75
36. STONE & CLAY PRODUCTS	0.02	0.02	0.02	0.03	0.03	0.03	8.21
37. PRIMARY FERROUS METALS	0.19	0.21	0.23	0.25	0.27	0.28	7.65
38. NONFERROUS METALS	0.13	0.15	0.16	0.18	0.19	0.20	8.94
40. FAB. STRUCTURAL METAL PRODUCTS	0.27	0.31	0.33	0.36	0.39	0.41	8.48
41. SCREW MACHINE PROD.&STAMPINGS	0.71	0.79	0.85	0.93	0.99	1.03	7.77
42. OTHER FAB. METAL PRODUCTS	0.39	0.45	0.50	0.56	0.61	0.65	10.44
43. ENGINES & TURBINES	0.17	0.20	0.22	0.23	0.24	0.25	7.72
44. FARM & GARDEN MACHINERY	0.01	0.01	0.01	0.01	0.01	0.01	8.11
45. CONSTR. & MINING MACHINERY	0.07	0.08	0.08	0.09	0.10	0.10	7.24
46. MATERIALS HANDLING MACH. & EQ.	0.12	0.14	0.15	0.16	0.18	0.18	9.12
47. METALWORKING MACH. & EQ.	0.70	0.80	0.88	0.98	1.05	1.10	9.36
48. SPECIAL INDUSTRY MACHINERY	0.04	0.04	0.05	0.05	0.06	0.06	12.06
49. GENERAL INDUSTRY MACHINERY	0.60	0.68	0.73	0.79	0.83	0.87	7.51
50. MISC. NONELECTRICAL MACH.	1.81	1.98	2.18	2.40	2.56	2.65	7.89
51. OFFICE,COMPUTING & ACCT. MACH.	0.04	0.05	0.05	0.05	0.06	0.06	7.32
52. SERVICE INDUSTRY MACHINES	0.03	0.03	0.03	0.04	0.04	0.05	13.37
53. ELECTRICAL MACHINERY	0.22	0.25	0.27	0.30	0.32	0.34	9.24
55. ELECTRIC LIGHTING & WIRING EQ.	0.09	0.11	0.11	0.12	0.13	0.14	8.25
56. RADIO,TV, & COMMUNICATION EQ.	0.51	0.59	0.65	0.71	0.74	0.76	8.13
57. ELECTRONIC COMPONENTS & ACCESS.	0.24	0.29	0.33	0.37	0.40	0.42	11.37
58. MISC. ELECTRICAL MACH. & EQ.	0.02	0.03	0.03	0.03	0.03	0.04	9.56
59. MOTOR VEHICLES & EQUIPMENT	0.17	0.20	0.23	0.27	0.32	0.37	17.14
60. AIRCRAFT & PARTS	5.12	5.79	6.38	7.04	7.53	7.73	8.59
61. OTHER TRANSPORTATION EQ.	0.40	0.43	0.44	0.45	0.46	0.47	3.21
62. INSTRUMENTS & SUPPLIES	0.60	0.68	0.74	0.81	0.86	0.89	8.09
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.06	0.06	0.07	0.08	0.08	0.09	8.57
64. MISC. MANUFACTURING	0.01	0.01	0.01	0.01	0.01	0.01	5.86
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.06	0.07	0.07	0.08	0.08	0.08	5.83
TOTAL, ALL INDUSTRIES	13.92	15.67	17.16	18.82	20.11	20.85	8.42
TOTAL EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	1.80	1.84	1.87	1.91	1.93	1.95	1.65
36. STONE & CLAY PRODUCTS	0.62	0.63	0.64	0.65	0.66	0.65	0.98
37. PRIMARY FERROUS METALS	2.70	2.78	2.86	2.89	2.89	2.88	1.29
38. NONFERROUS METALS	1.54	1.59	1.65	1.69	1.72	1.73	2.37

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
132. LATHE MACHINE OPERATORS, METAL
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
40. FAB. STRUCTURAL METAL PRODUCTS	6.14	6.21	6.42	6.68	6.88	7.02	2.70
41. SCREW MACHINE PROD.&STAMPINGS	11.56	12.16	12.56	12.79	12.86	12.92	2.23
42. OTHER FAB. METAL PRODUCTS	8.57	8.90	9.36	9.71	9.99	10.28	3.70
43. ENGINES & TURBINES	2.09	2.16	2.24	2.26	2.27	2.28	1.78
44. FARM & GARDEN MACHINERY	2.31	2.37	2.49	2.53	2.56	2.58	2.27
45. CONSTR. & MINING MACHINERY	5.88	6.21	6.54	6.77	6.95	7.03	3.64
46. MATERIALS HANDLING MACH. & EQ.	2.10	2.17	2.30	2.39	2.46	2.51	3.62
47. METALWORKING MACH. & EQ.	13.61	14.17	15.01	15.62	16.07	16.37	3.76
48. SPECIAL INDUSTRY MACHINERY	5.07	5.18	5.44	5.68	5.82	5.94	3.22
49. GENERAL INDUSTRY MACHINERY	13.78	14.12	14.78	15.18	15.43	15.68	2.62
50. MISC. NONELECTRICAL MACH.	15.81	16.28	17.02	17.47	17.68	17.94	2.56
51. OFFICE,COMPUTING & ACCT. MACH.	1.06	1.10	1.15	1.17	1.18	1.21	2.72
52. SERVICE INDUSTRY MACHINES	1.46	1.52	1.59	1.62	1.62	1.62	2.11
53. ELECTRICAL MACHINERY	4.38	4.47	4.67	4.79	4.84	4.88	2.18
55. ELECTRIC LIGHTING & WIRING EQ.	1.96	1.97	2.03	2.08	2.11	2.13	1.70
56. RADIO,TV, & COMMUNICATION EQ.	1.22	1.25	1.29	1.31	1.32	1.34	1.98
57. ELECTRONIC COMPONENTS & ACCESS.	1.12	1.16	1.22	1.27	1.31	1.33	3.65
58. MISC. ELECTRICAL MACH. & EQ.	0.84	0.87	0.90	0.91	0.92	0.93	2.11
59. MOTOR VEHICLES & EQUIPMENT	8.79	9.19	9.50	9.65	9.76	9.81	2.23
60. AIRCRAFT & PARTS	10.25	10.66	10.95	11.30	11.32	11.31	2.00
61. OTHER TRANSPORTATION EQ.	1.40	1.44	1.48	1.51	1.52	1.53	1.80
62. INSTRUMENTS & SUPPLIES	5.19	5.27	5.47	5.68	5.82	5.91	2.64
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	1.32	1.34	1.40	1.46	1.51	1.55	3.20
64. MISC. MANUFACTURING	0.69	0.70	0.72	0.74	0.75	0.75	1.83
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.56	0.58	0.60	0.62	0.63	0.64	2.68
TOTAL, ALL INDUSTRIES	134.35	138.82	144.72	148.90	151.38	153.33	2.68

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
133. MACHINE TOOL OPERATORS, COMB.
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	0.84	0.95	1.04	1.12	1.18	1.23	7.81
23. OTHER FURNITURE & FIXTURES	0.01	0.01	0.01	0.01	0.01	0.01	4.66
36. STONE & CLAY PRODUCTS	0.04	0.04	0.04	0.05	0.05	0.05	8.32
37. PRIMARY FERROUS METALS	0.14	0.15	0.17	0.18	0.19	0.20	8.11
38. NONFERROUS METALS	0.15	0.17	0.19	0.21	0.22	0.23	8.69
40. FAB. STRUCTURAL METAL PRODUCTS	0.32	0.36	0.38	0.41	0.43	0.46	7.68
41. SCREW MACHINE PROD.&STAMPINGS	0.63	0.70	0.76	0.84	0.89	0.93	8.34
42. OTHER FAB. METAL PRODUCTS	0.23	0.27	0.29	0.33	0.35	0.38	9.96
43. ENGINES & TURBINES	0.06	0.07	0.08	0.08	0.08	0.09	7.71
45. CONSTR. & MINING MACHINERY	0.06	0.07	0.07	0.08	0.08	0.08	7.24
46. MATERIALS HANDLING MACH. & EQ.	0.10	0.12	0.13	0.14	0.15	0.16	9.12
47. METALWORKING MACH. & EQ.	0.82	0.95	1.04	1.15	1.23	1.29	9.36
48. SPECIAL INDUSTRY MACHINERY	0.03	0.04	0.04	0.05	0.05	0.05	12.06
49. GENERAL INDUSTRY MACHINERY	0.34	0.38	0.41	0.44	0.47	0.49	7.51
50. MISC. NONELECTRICAL MACH.	2.65	2.89	3.17	3.48	3.70	3.81	7.54
51. OFFICE,COMPUTING & ACCT. MACH.	0.05	0.06	0.07	0.07	0.07	0.07	7.32
52. SERVICE INDUSTRY MACHINES	0.07	0.08	0.08	0.10	0.11	0.12	13.37
53. ELECTRICAL MACHINERY	0.15	0.18	0.19	0.21	0.23	0.24	9.27
54. HOUSEHOLD APPLIANCES	0.01	0.01	0.01	0.01	0.01	0.01	9.51
55. ELECTRIC LIGHTING & WIRING EQ.	0.06	0.07	0.08	0.09	0.09	0.10	8.25
56. RADIO,TV, & COMMUNICATION EQ.	1.59	1.83	2.01	2.18	2.29	2.34	8.02
57. ELECTRONIC COMPONENTS & ACCESS.	0.41	0.49	0.55	0.62	0.67	0.70	11.37
58. MISC. ELECTRICAL MACH. & EQ.	0.03	0.03	0.03	0.04	0.04	0.04	9.58
59. MOTOR VEHICLES & EQUIPMENT	0.38	0.45	0.51	0.61	0.71	0.84	17.14
60. AIRCRAFT & PARTS	3.75	4.24	4.67	5.15	5.51	5.66	8.59
61. OTHER TRANSPORTATION EQ.	0.72	0.76	0.78	0.80	0.82	0.85	3.17
62. INSTRUMENTS & SUPPLIES	0.67	0.76	0.83	0.90	0.96	1.00	8.24
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.08	0.09	0.09	0.10	0.11	0.12	8.61
64. MISC. MANUFACTURING	0.01	0.01	0.01	0.01	0.01	0.01	6.50
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.02	0.02	0.02	0.02	0.02	0.02	5.83
TOTAL, ALL INDUSTRIES	14.44	16.25	17.79	19.49	20.82	21.62	8.41
TOTAL EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	1.40	1.43	1.45	1.49	1.50	1.52	1.71
23. OTHER FURNITURE & FIXTURES	0.55	0.55	0.57	0.59	0.60	0.61	2.23
36. STONE & CLAY PRODUCTS	1.09	1.11	1.13	1.16	1.17	1.15	1.08

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
133. MACHINE TOOL OPERATORS, COMB.
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
37. PRIMARY FERROUS METALS	1.93	2.00	2.06	2.09	2.11	2.10	1.72
38. NONFERROUS METALS	1.78	1.84	1.90	1.95	1.97	1.98	2.14
40. FAB. STRUCTURAL METAL PRODUCTS	7.10	7.12	7.30	7.54	7.71	7.81	1.94
41. SCREW MACHINE PROD.&STAMPINGS	10.20	10.79	11.21	11.47	11.60	11.70	2.78
42. OTHER FAB. METAL PRODUCTS	5.07	5.24	5.49	5.67	5.81	5.95	3.24
43. ENGINES & TURBINES	0.73	0.76	0.79	0.79	0.80	0.80	1.77
45. CONSTR. & MINING MACHINERY	5.05	5.33	5.61	5.81	5.97	6.03	3.64
46. MATERIALS HANDLING MACH. & EQ.	1.80	1.86	1.97	2.05	2.11	2.15	3.62
47. METALWORKING MACH. & EQ.	16.00	16.65	17.64	18.36	18.89	19.25	3.76
48. SPECIAL INDUSTRY MACHINERY	4.29	4.38	4.60	4.81	4.92	5.03	3.22
49. GENERAL INDUSTRY MACHINERY	7.81	8.00	8.38	8.60	8.74	8.88	2.62
50. MISC. NONELECTRICAL MACH.	23.17	23.77	24.78	25.34	25.57	25.87	2.23
51. OFFICE,COMPUTING & ACCT. MACH.	1.39	1.45	1.51	1.54	1.56	1.59	2.72
52. SERVICE INDUSTRY MACHINES	3.61	3.75	3.93	4.00	4.01	4.01	2.10
53. ELECTRICAL MACHINERY	3.08	3.14	3.29	3.37	3.41	3.44	2.21
54. HOUSEHOLD APPLIANCES	2.16	2.21	2.27	2.35	2.40	2.44	2.48
55. ELECTRIC LIGHTING & WIRING EQ.	1.35	1.35	1.39	1.42	1.45	1.46	1.70
56. RADIO,TV, & COMMUNICATION EQ.	3.77	3.86	3.98	4.04	4.08	4.14	1.88
57. ELECTRONIC COMPONENTS & ACCESS.	1.88	1.96	2.05	2.14	2.20	2.24	3.65
58. MISC. ELECTRICAL MACH. & EQ.	0.99	1.02	1.06	1.08	1.09	1.10	2.13
59. MOTOR VEHICLES & EQUIPMENT	19.59	20.48	21.18	21.51	21.75	21.87	2.23
60. AIRCRAFT & PARTS	7.50	7.80	8.02	8.27	8.29	8.28	2.00
61. OTHER TRANSPORTATION EQ.	2.50	2.57	2.65	2.71	2.71	2.73	1.76
62. INSTRUMENTS & SUPPLIES	5.77	5.87	6.11	6.34	6.51	6.62	2.78
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	1.82	1.85	1.93	2.02	2.09	2.14	3.24
64. MISC. MANUFACTURING	0.92	0.93	0.97	1.00	1.02	1.03	2.44
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.18	0.18	0.19	0.19	0.20	0.20	2.55
TOTAL, ALL INDUSTRIES	147.91	152.72	158.92	163.24	165.77	167.74	2.55

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
134. MACHINE TOOL OPER. NUMER. CONTROL
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	0.85	0.96	1.05	1.14	1.20	1.25	7.90
37. PRIMARY FERROUS METALS	0.03	0.03	0.03	0.04	0.04	0.04	7.67
38. NONFERROUS METALS	0.04	0.05	0.05	0.06	0.06	0.07	9.05
40. FAB. STRUCTURAL METAL PRODUCTS	0.07	0.08	0.08	0.09	0.09	0.10	7.86
41. SCREW MACHINE PROD.&STAMPINGS	0.04	0.04	0.05	0.05	0.05	0.06	7.76
42. OTHER FAB. METAL PRODUCTS	0.06	0.07	0.07	0.08	0.09	0.09	10.06
43. ENGINES & TURBINES	0.09	0.10	0.11	0.12	0.13	0.13	7.71
45. CONSTR. & MINING MACHINERY	0.03	0.03	0.03	0.04	0.04	0.04	7.24
46. MATERIALS HANDLING MACH. & EQ.	0.05	0.06	0.06	0.07	0.07	0.08	9.12
47. METALWORKING MACH. & EQ.	0.36	0.41	0.45	0.50	0.53	0.56	9.36
48. SPECIAL INDUSTRY MACHINERY	0.02	0.02	0.02	0.03	0.03	0.03	12.06
49. GENERAL INDUSTRY MACHINERY	0.15	0.17	0.18	0.20	0.21	0.22	7.51
50. MISC. NONELECTRICAL MACH.	0.62	0.68	0.74	0.82	0.87	0.90	7.54
51. OFFICE,COMPUTING & ACCT. MACH.	0.04	0.04	0.05	0.05	0.05	0.05	7.32
52. SERVICE INDUSTRY MACHINES	0.01	0.01	0.01	0.01	0.01	0.02	13.37
53. ELECTRICAL MACHINERY	0.07	0.08	0.08	0.09	0.10	0.10	9.12
55. ELECTRIC LIGHTING & WIRING EQ.	0.01	0.02	0.02	0.02	0.02	0.02	8.24
56. RADIO,TV, & COMMUNICATION EQ.	0.34	0.39	0.43	0.47	0.50	0.51	8.21
57. ELECTRONIC COMPONENTS & ACCESS.	0.59	0.70	0.79	0.89	0.97	1.01	11.37
58. MISC. ELECTRICAL MACH. & EQ.	0.01	0.01	0.01	0.01	0.02	0.02	9.56
59. MOTOR VEHICLES & EQUIPMENT	0.01	0.02	0.02	0.02	0.03	0.03	17.15
60. AIRCRAFT & PARTS	1.94	2.20	2.42	2.68	2.86	2.94	8.59
61. OTHER TRANSPORTATION EQ.	0.15	0.16	0.16	0.17	0.17	0.17	3.03
62. INSTRUMENTS & SUPPLIES	0.18	0.20	0.22	0.24	0.25	0.26	8.10
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.03	0.03	0.04	0.04	0.04	0.05	8.54
64. MISC. MANUFACTURING	0.01	0.01	0.01	0.01	0.01	0.01	7.40
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.01	0.01	0.01	0.01	0.01	0.01	5.69
TOTAL, ALL INDUSTRIES	5.82	6.59	7.24	7.94	8.47	8.77	8.55
TOTAL EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	1.41	1.44	1.47	1.50	1.52	1.54	1.79
37. PRIMARY FERROUS METALS	0.38	0.39	0.40	0.41	0.41	0.41	1.31
38. NONFERROUS METALS	0.51	0.52	0.54	0.56	0.57	0.57	2.47
40. FAB. STRUCTURAL METAL PRODUCTS	1.52	1.53	1.57	1.62	1.66	1.69	2.11
41. SCREW MACHINE PROD.&STAMPINGS	0.63	0.66	0.68	0.69	0.70	0.70	2.22
42. OTHER FAB. METAL PRODUCTS	1.26	1.31	1.37	1.42	1.45	1.49	3.34

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
134. MACHINE TOOL OPER. NUMER. CONTROL
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
43. ENGINES & TURBINES	1.10	1.13	1.17	1.19	1.19	1.20	1.77
45. CONSTR. & MINING MACHINERY	2.43	2.57	2.71	2.80	2.88	2.91	3.64
46. MATERIALS HANDLING MACH. & EQ.	0.87	0.90	0.95	0.99	1.02	1.04	3.62
47. METALWORKING MACH. & EQ.	6.92	7.20	7.63	7.94	8.17	8.32	3.76
48. SPECIAL INDUSTRY MACHINERY	2.51	2.56	2.69	2.81	2.88	2.94	3.22
49. GENERAL INDUSTRY MACHINERY	3.49	3.58	3.74	3.84	3.91	3.97	2.62
50. MISC. NONELECTRICAL MACH.	5.44	5.58	5.82	5.95	6.00	6.07	2.23
51. OFFICE,COMPUTING & ACCT. MACH.	1.01	1.05	1.09	1.11	1.13	1.16	2.72
52. SERVICE INDUSTRY MACHINES	0.49	0.51	0.53	0.54	0.54	0.54	2.11
53. ELECTRICAL MACHINERY	1.33	1.35	1.41	1.44	1.46	1.47	2.06
55. ELECTRIC LIGHTING & WIRING EQ.	0.30	0.30	0.31	0.31	0.32	0.32	1.70
56. RADIO,TV, & COMMUNICATION EQ.	0.81	0.83	0.86	0.87	0.88	0.90	2.05
57. ELECTRONIC COMPONENTS & ACCESS.	2.70	2.82	2.96	3.08	3.17	3.23	3.65
58. MISC. ELECTRICAL MACH. & EQ.	0.40	0.41	0.43	0.43	0.44	0.44	2.12
59. MOTOR VEHICLES & EQUIPMENT	0.76	0.79	0.82	0.83	0.84	0.85	2.24
60. AIRCRAFT & PARTS	3.90	4.05	4.16	4.29	4.30	4.30	2.00
61. OTHER TRANSPORTATION EQ.	0.52	0.53	0.55	0.56	0.56	0.56	1.63
62. INSTRUMENTS & SUPPLIES	1.53	1.56	1.62	1.68	1.72	1.75	2.65
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.69	0.70	0.73	0.76	0.79	0.81	3.18
64. MISC. MANUFACTURING	0.65	0.66	0.70	0.72	0.75	0.76	3.31
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.08	0.08	0.08	0.09	0.09	0.09	2.77
TOTAL, ALL INDUSTRIES	44.58	46.01	48.02	49.50	50.40	51.10	2.77

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
135. MACHINE TOOL OPERATORS, TOOL ROOM
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	0.24	0.28	0.30	0.32	0.34	0.35	7.52
37. PRIMARY FERROUS METALS	0.04	0.05	0.05	0.06	0.06	0.07	8.67
38. NONFERROUS METALS	0.05	0.06	0.06	0.07	0.07	0.08	8.98
40. FAB. STRUCTURAL METAL PRODUCTS	0.06	0.07	0.07	0.08	0.08	0.09	8.38
41. SCREW MACHINE PROD.&STAMPINGS	0.13	0.14	0.15	0.17	0.18	0.18	7.71
42. OTHER FAB. METAL PRODUCTS	0.04	0.04	0.05	0.05	0.06	0.06	10.11
43. ENGINES & TURBINES	0.11	0.12	0.13	0.14	0.15	0.16	7.71
45. CONSTR. & MINING MACHINERY	0.01	0.02	0.02	0.02	0.02	0.02	7.25
46. MATERIALS HANDLING MACH. & EQ.	0.02	0.03	0.03	0.03	0.04	0.04	9.12
47. METALWORKING MACH. & EQ.	0.19	0.22	0.24	0.27	0.29	0.30	9.36
49. GENERAL INDUSTRY MACHINERY	0.06	0.07	0.07	0.08	0.08	0.09	7.52
50. MISC. NONELECTRICAL MACH.	0.11	0.12	0.13	0.15	0.15	0.16	7.54
51. OFFICE,COMPUTING & ACCT. MACH.	0.02	0.02	0.02	0.02	0.02	0.02	7.32
53. ELECTRICAL MACHINERY	0.08	0.09	0.10	0.11	0.12	0.13	9.23
55. ELECTRIC LIGHTING & WIRING EQ.	0.04	0.05	0.05	0.06	0.06	0.07	8.25
56. RADIO,TV, & COMMUNICATION EQ.	0.29	0.33	0.36	0.39	0.41	0.42	8.06
57. ELECTRONIC COMPONENTS & ACCESS.	0.11	0.13	0.15	0.17	0.18	0.19	11.35
58. MISC. ELECTRICAL MACH. & EQ.	0.03	0.03	0.04	0.04	0.04	0.05	9.56
59. MOTOR VEHICLES & EQUIPMENT	0.15	0.18	0.20	0.24	0.28	0.32	17.14
60. AIRCRAFT & PARTS	1.46	1.65	1.82	2.01	2.15	2.21	8.59
61. OTHER TRANSPORTATION EQ.	0.11	0.12	0.12	0.13	0.13	0.13	2.86
62. INSTRUMENTS & SUPPLIES	0.12	0.14	0.15	0.17	0.18	0.18	8.31
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.02	0.02	0.02	0.02	0.02	0.02	8.49
64. MISC. MANUFACTURING	0.01	0.01	0.01	0.01	0.01	0.01	5.81
TOTAL, ALL INDUSTRIES	3.52	3.99	4.37	4.80	5.14	5.35	8.77
TOTAL EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	0.40	0.41	0.42	0.43	0.43	0.43	1.44
37. PRIMARY FERROUS METALS	0.63	0.65	0.68	0.69	0.70	0.70	2.25
38. NONFERROUS METALS	0.58	0.60	0.63	0.64	0.65	0.66	2.41
40. FAB. STRUCTURAL METAL PRODUCTS	1.29	1.30	1.35	1.40	1.44	1.47	2.60
41. SCREW MACHINE PROD.&STAMPINGS	2.06	2.16	2.23	2.27	2.28	2.29	2.18
42. OTHER FAB. METAL PRODUCTS	0.80	0.82	0.86	0.89	0.92	0.94	3.38
43. ENGINES & TURBINES	1.29	1.33	1.38	1.39	1.40	1.41	1.77
45. CONSTR. & MINING MACHINERY	1.23	1.30	1.37	1.42	1.45	1.47	3.64
46. MATERIALS HANDLING MACH. & EQ.	0.44	0.45	0.48	0.50	0.51	0.52	3.62

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
135. MACHINE TOOL OPERATORS, TOOL ROOM
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
47. METALWORKING MACH. & EQ.	3.71	3.86	4.09	4.25	4.38	4.46	3.76
49. GENERAL INDUSTRY MACHINERY	1.38	1.41	1.48	1.52	1.54	1.57	2.62
50. MISC. NONELECTRICAL MACH.	0.97	1.00	1.04	1.06	1.07	1.08	2.23
51. OFFICE,COMPUTING & ACCT. MACH.	0.44	0.46	0.48	0.49	0.50	0.51	2.73
53. ELECTRICAL MACHINERY	1.62	1.65	1.73	1.77	1.79	1.80	2.17
55. ELECTRIC LIGHTING & WIRING EQ.	0.93	0.94	0.97	0.99	1.00	1.02	1.70
56. RADIO,TV, & COMMUNICATION EQ.	0.68	0.69	0.72	0.73	0.73	0.75	1.92
57. ELECTRONIC COMPONENTS & ACCESS.	0.51	0.53	0.55	0.57	0.59	0.60	3.63
58. MISC. ELECTRICAL MACH. & EQ.	1.06	1.09	1.14	1.15	1.16	1.17	2.11
59. MOTOR VEHICLES & EQUIPMENT	7.59	7.94	8.20	8.34	8.43	8.48	2.23
60. AIRCRAFT & PARTS	2.93	3.05	3.13	3.23	3.24	3.23	2.00
61. OTHER TRANSPORTATION EQ.	0.40	0.41	0.42	0.43	0.42	0.43	1.46
62. INSTRUMENTS & SUPPLIES	1.05	1.07	1.11	1.16	1.19	1.21	2.85
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.35	0.35	0.37	0.38	0.39	0.40	3.13
64. MISC. MANUFACTURING	0.49	0.49	0.51	0.52	0.53	0.53	1.78
TOTAL, ALL INDUSTRIES	34.66	35.86	37.27	38.22	38.79	39.20	2.49

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
136. MILLING&PLANING MACHINE OPERATORS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	1.81	2.05	2.24	2.42	2.55	2.65	7.89
37. PRIMARY FERROUS METALS	0.07	0.07	0.08	0.09	0.09	0.10	8.24
38. NONFERROUS METALS	0.04	0.04	0.05	0.05	0.05	0.06	9.30
40. FAB. STRUCTURAL METAL PRODUCTS	0.08	0.10	0.10	0.11	0.12	0.13	8.15
41. SCREW MACHINE PROD.&STAMPINGS	0.09	0.10	0.11	0.12	0.12	0.13	7.74
42. OTHER FAB. METAL PRODUCTS	0.05	0.06	0.06	0.07	0.08	0.08	10.11
43. ENGINES & TURBINES	0.17	0.19	0.21	0.22	0.23	0.24	7.72
45. CONSTR. & MINING MACHINERY	0.03	0.04	0.04	0.04	0.05	0.05	7.25
46. MATERIALS HANDLING MACH. & EQ.	0.06	0.06	0.07	0.08	0.08	0.09	9.12
47. METALWORKING MACH. & EQ.	0.56	0.65	0.71	0.79	0.85	0.88	9.36
48. SPECIAL INDUSTRY MACHINERY	0.02	0.03	0.03	0.04	0.04	0.04	12.06
49. GENERAL INDUSTRY MACHINERY	0.18	0.20	0.22	0.23	0.25	0.26	7.52
50. MISC. NONELECTRICAL MACH.	0.91	0.99	1.08	1.19	1.26	1.30	7.53
51. OFFICE,COMPUTING & ACCT. MACH.	0.03	0.03	0.03	0.03	0.04	0.04	7.30
52. SERVICE INDUSTRY MACHINES	0.01	0.01	0.01	0.01	0.01	0.02	13.37
53. ELECTRICAL MACHINERY	0.07	0.09	0.09	0.10	0.11	0.12	9.17
55. ELECTRIC LIGHTING & WIRING EQ.	0.01	0.02	0.02	0.02	0.02	0.02	8.27
56. RADIO,TV, & COMMUNICATION EQ.	0.32	0.37	0.41	0.44	0.47	0.48	8.29
57. ELECTRONIC COMPONENTS & ACCESS.	0.08	0.09	0.10	0.11	0.12	0.13	11.36
59. MOTOR VEHICLES & EQUIPMENT	0.06	0.07	0.08	0.09	0.10	0.12	17.14
60. AIRCRAFT & PARTS	4.21	4.77	5.25	5.80	6.20	6.36	8.59
61. OTHER TRANSPORTATION EQ.	0.16	0.17	0.17	0.18	0.18	0.19	3.53
62. INSTRUMENTS & SUPPLIES	0.18	0.20	0.22	0.24	0.26	0.27	8.23
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.05	0.06	0.06	0.07	0.07	0.08	8.53
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.04	0.04	0.05	0.05	0.05	0.05	5.34
TOTAL, ALL INDUSTRIES	9.31	10.50	11.51	12.62	13.45	13.90	8.35
TOTAL EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	3.00	3.07	3.13	3.20	3.24	3.28	1.79
37. PRIMARY FERROUS METALS	0.93	0.96	0.99	1.01	1.02	1.01	1.85
38. NONFERROUS METALS	0.43	0.45	0.46	0.48	0.48	0.49	2.71
40. FAB. STRUCTURAL METAL PRODUCTS	1.90	1.92	1.97	2.05	2.10	2.14	2.39
41. SCREW MACHINE PROD.&STAMPINGS	1.44	1.51	1.56	1.59	1.60	1.61	2.21
42. OTHER FAB. METAL PRODUCTS	1.07	1.11	1.16	1.20	1.23	1.27	3.39
43. ENGINES & TURBINES	2.01	2.07	2.15	2.17	2.19	2.19	1.78
45. CONSTR. & MINING MACHINERY	2.77	2.93	3.08	3.19	3.27	3.31	3.64

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
136. MILLING&PLANING MACHINE OPERATORS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
46. MATERIALS HANDLING MACH. & EQ.	0.99	1.02	1.08	1.13	1.16	1.18	3.62
47. METALWORKING MACH. & EQ.	10.97	11.42	12.10	12.59	12.95	13.20	3.76
48. SPECIAL INDUSTRY MACHINERY	3.39	3.46	3.63	3.80	3.89	3.97	3.22
49. GENERAL INDUSTRY MACHINERY	4.10	4.20	4.40	4.52	4.60	4.67	2.62
50. MISC. NONELECTRICAL MACH.	7.91	8.12	8.46	8.65	8.73	8.84	2.23
51. OFFICE,COMPUTING & ACCT. MACH.	0.67	0.70	0.73	0.74	0.75	0.77	2.71
52. SERVICE INDUSTRY MACHINES	0.49	0.51	0.53	0.54	0.54	0.54	2.11
53. ELECTRICAL MACHINERY	1.49	1.52	1.59	1.63	1.65	1.66	2.12
55. ELECTRIC LIGHTING & WIRING EQ.	0.31	0.31	0.32	0.33	0.34	0.34	1.72
56. RADIO,TV, & COMMUNICATION EQ.	0.76	0.78	0.81	0.82	0.83	0.85	2.14
57. ELECTRONIC COMPONENTS & ACCESS.	0.35	0.36	0.38	0.39	0.40	0.41	3.64
59. MOTOR VEHICLES & EQUIPMENT	2.87	3.00	3.10	3.15	3.19	3.21	2.23
60. AIRCRAFT & PARTS	8.44	8.78	9.02	9.30	9.32	9.32	2.00
61. OTHER TRANSPORTATION EQ.	0.55	0.56	0.58	0.60	0.60	0.61	2.12
62. INSTRUMENTS & SUPPLIES	1.55	1.58	1.64	1.70	1.75	1.78	2.77
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	1.20	1.22	1.27	1.33	1.37	1.40	3.17
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.25	0.26	0.27	0.28	0.28	0.28	2.67
TOTAL, ALL INDUSTRIES	61.56	63.58	66.27	68.27	69.39	70.24	2.67

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
137. POURERS, METAL
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	0.01	0.01	0.02	0.02	0.02	0.02	5.97
37. PRIMARY FERROUS METALS	0.48	0.54	0.59	0.65	0.70	0.73	8.94
38. NONFERROUS METALS	0.25	0.28	0.31	0.33	0.36	0.37	8.59
40. FAB. STRUCTURAL METAL PRODUCTS	0.03	0.03	0.03	0.03	0.04	0.04	8.71
41. SCREW MACHINE PROD.&STAMPINGS	0.02	0.02	0.02	0.02	0.02	0.02	7.67
42. OTHER FAB. METAL PRODUCTS	0.01	0.02	0.02	0.02	0.02	0.02	10.10
47. METALWORKING MACH. & EQ.	0.01	0.01	0.01	0.01	0.01	0.02	9.38
49. GENERAL INDUSTRY MACHINERY	0.01	0.01	0.01	0.02	0.02	0.02	7.51
50. MISC. NONELECTRICAL MACH.	0.01	0.01	0.01	0.01	0.01	0.01	7.67
53. ELECTRICAL MACHINERY	0.01	0.01	0.01	0.01	0.01	0.01	9.23
55. ELECTRIC LIGHTING & WIRING EQ.	0.01	0.01	0.01	0.01	0.01	0.01	8.21
58. MISC. ELECTRICAL MACH. & EQ.	0.01	0.01	0.01	0.01	0.01	0.01	9.52
59. MOTOR VEHICLES & EQUIPMENT	0.01	0.01	0.01	0.01	0.01	0.01	17.15
60. AIRCRAFT & PARTS	0.05	0.05	0.06	0.06	0.07	0.07	8.65
61. OTHER TRANSPORTATION EQ.	0.01	0.01	0.01	0.01	0.01	0.01	2.61
TOTAL, ALL INDUSTRIES	0.91	1.03	1.12	1.23	1.32	1.38	8.76
TOTAL EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	0.02	0.02	0.02	0.02	0.02	0.02	-0.03
37. PRIMARY FERROUS METALS	6.69	6.98	7.27	7.44	7.54	7.58	2.51
38. NONFERROUS METALS	2.90	2.99	3.09	3.16	3.19	3.21	2.04
40. FAB. STRUCTURAL METAL PRODUCTS	0.56	0.57	0.59	0.62	0.64	0.65	2.91
41. SCREW MACHINE PROD.&STAMPINGS	0.26	0.27	0.28	0.29	0.29	0.29	2.14
42. OTHER FAB. METAL PRODUCTS	0.28	0.29	0.31	0.32	0.33	0.34	3.38
47. METALWORKING MACH. & EQ.	0.19	0.20	0.21	0.22	0.22	0.23	3.78
49. GENERAL INDUSTRY MACHINERY	0.28	0.29	0.30	0.31	0.31	0.32	2.61
50. MISC. NONELECTRICAL MACH.	0.05	0.05	0.06	0.06	0.06	0.06	2.35
53. ELECTRICAL MACHINERY	0.12	0.12	0.13	0.13	0.13	0.13	2.17
55. ELECTRIC LIGHTING & WIRING EQ.	0.20	0.20	0.21	0.21	0.21	0.22	1.66
58. MISC. ELECTRICAL MACH. & EQ.	0.25	0.26	0.27	0.27	0.27	0.28	2.08
59. MOTOR VEHICLES & EQUIPMENT	0.33	0.34	0.35	0.36	0.36	0.36	2.24
60. AIRCRAFT & PARTS	0.09	0.09	0.10	0.10	0.10	0.10	2.05
61. OTHER TRANSPORTATION EQ.	0.03	0.03	0.03	0.03	0.03	0.03	1.20
TOTAL, ALL INDUSTRIES	12.98	13.45	13.99	14.33	14.52	14.64	2.43

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE

BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
138. POWER BRAKE&BENDING MACH. OP.
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	0.30	0.35	0.38	0.42	0.44	0.46	8.90
23. OTHER FURNITURE & FIXTURES	0.05	0.05	0.05	0.05	0.06	0.06	4.88
37. PRIMARY FERROUS METALS	0.05	0.05	0.05	0.06	0.06	0.06	6.97
38. NONFERROUS METALS	0.03	0.03	0.04	0.04	0.04	0.04	9.55
40. FAB. STRUCTURAL METAL PRODUCTS	0.43	0.48	0.51	0.55	0.58	0.61	7.35
41. SCREW MACHINE PROD.&STAMPINGS	0.12	0.14	0.15	0.16	0.17	0.18	7.69
42. OTHER FAB. METAL PRODUCTS	0.18	0.21	0.23	0.26	0.28	0.30	10.05
45. CONSTR. & MINING MACHINERY	0.01	0.01	0.01	0.01	0.02	0.02	7.24
46. MATERIALS HANDLING MACH. & EQ.	0.02	0.02	0.02	0.03	0.03	0.03	9.12
47. METALWORKING MACH. & EQ.	0.01	0.01	0.01	0.02	0.02	0.02	9.40
49. GENERAL INDUSTRY MACHINERY	0.03	0.03	0.04	0.04	0.04	0.04	7.51
50. MISC. NONELECTRICAL MACH.	0.02	0.02	0.03	0.03	0.03	0.03	7.53
51. OFFICE,COMPUTING & ACCT. MACH.	0.01	0.02	0.02	0.02	0.02	0.02	7.32
52. SERVICE INDUSTRY MACHINES	0.04	0.05	0.05	0.06	0.07	0.08	13.36
53. ELECTRICAL MACHINERY	0.05	0.05	0.06	0.06	0.07	0.07	8.82
55. ELECTRIC LIGHTING & WIRING EQ.	0.03	0.04	0.04	0.05	0.05	0.05	8.25
56. RADIO,TV, & COMMUNICATION EQ.	0.13	0.14	0.16	0.17	0.18	0.19	8.09
57. ELECTRONIC COMPONENTS & ACCESS.	0.02	0.02	0.02	0.03	0.03	0.03	11.37
59. MOTOR VEHICLES & EQUIPMENT	0.06	0.07	0.08	0.10	0.12	0.14	17.14
60. AIRCRAFT & PARTS	0.76	0.86	0.95	1.05	1.12	1.15	8.60
61. OTHER TRANSPORTATION EQ.	0.16	0.17	0.17	0.17	0.18	0.18	3.07
62. INSTRUMENTS & SUPPLIES	0.05	0.05	0.06	0.06	0.07	0.07	8.23
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.01	0.01	0.01	0.01	0.01	0.01	8.41
TOTAL, ALL INDUSTRIES	2.59	2.92	3.18	3.48	3.71	3.88	8.38
TOTAL EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	0.50	0.52	0.53	0.55	0.56	0.57	2.74
23. OTHER FURNITURE & FIXTURES	3.00	3.03	3.13	3.23	3.31	3.39	2.45
37. PRIMARY FERROUS METALS	0.64	0.66	0.67	0.67	0.67	0.66	0.65
38. NONFERROUS METALS	0.33	0.35	0.36	0.37	0.38	0.38	2.94
40. FAB. STRUCTURAL METAL PRODUCTS	9.56	9.56	9.77	10.07	10.26	10.37	1.63
41. SCREW MACHINE PROD.&STAMPINGS	1.98	2.08	2.14	2.18	2.19	2.20	2.16
42. OTHER FAB. METAL PRODUCTS	4.00	4.13	4.33	4.48	4.59	4.71	3.33
45. CONSTR. & MINING MACHINERY	0.96	1.01	1.07	1.10	1.13	1.15	3.64
46. MATERIALS HANDLING MACH. & EQ.	0.34	0.35	0.37	0.39	0.40	0.41	3.62
47. METALWORKING MACH. & EQ.	0.23	0.24	0.25	0.26	0.27	0.28	3.80

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
138. POWER BRAKE&BENDING MACH. OP.
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
49. GENERAL INDUSTRY MACHINERY	0.68	0.69	0.73	0.75	0.76	0.77	2.62
50. MISC. NONELECTRICAL MACH.	0.19	0.19	0.20	0.20	0.21	0.21	2.23
51. OFFICE,COMPUTING & ACCT. MACH.	0.37	0.39	0.40	0.41	0.42	0.43	2.72
52. SERVICE INDUSTRY MACHINES	2.21	2.30	2.41	2.45	2.46	2.46	2.10
53. ELECTRICAL MACHINERY	0.92	0.94	0.98	1.00	1.00	1.01	1.79
55. ELECTRIC LIGHTING & WIRING EQ.	0.73	0.74	0.76	0.78	0.79	0.80	1.70
56. RADIO,TV, & COMMUNICATION EQ.	0.30	0.31	0.31	0.32	0.32	0.33	1.95
57. ELECTRONIC COMPONENTS & ACCESS.	0.08	0.08	0.09	0.09	0.09	0.10	3.65
59. MOTOR VEHICLES & EQUIPMENT	3.20	3.35	3.46	3.52	3.56	3.58	2.23
60. AIRCRAFT & PARTS	1.53	1.59	1.63	1.68	1.69	1.69	2.00
61. OTHER TRANSPORTATION EQ.	0.55	0.56	0.58	0.59	0.59	0.59	1.66
62. INSTRUMENTS & SUPPLIES	0.40	0.41	0.42	0.44	0.45	0.46	2.77
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.21	0.21	0.22	0.23	0.23	0.24	3.05
TOTAL, ALL INDUSTRIES	35.76	36.61	37.87	38.90	39.51	39.98	2.26

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE
BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
139. PUNCH PRESS OPERATORS, METAL
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	0.63	0.72	0.79	0.86	0.91	0.94	8.30
22. HOUSEHOLD FURNITURE	0.01	0.01	0.02	0.02	0.02	0.02	3.70
23. OTHER FURNITURE & FIXTURES	0.08	0.09	0.09	0.09	0.10	0.10	4.80
25. PAPERBOARD CONTAINERS & BOXES	0.02	0.02	0.02	0.02	0.02	0.02	8.77
37. PRIMARY FERROUS METALS	0.09	0.10	0.10	0.11	0.12	0.13	7.66
38. NONFERROUS METALS	0.46	0.53	0.58	0.63	0.67	0.70	8.54
39. METAL CONTAINERS	0.06	0.06	0.07	0.07	0.08	0.08	6.61
40. FAB. STRUCTURAL METAL PRODUCTS	1.03	1.16	1.24	1.34	1.42	1.50	7.80
41. SCREW MACHINE PROD.&STAMPINGS	2.14	2.37	2.53	2.74	2.88	2.98	6.81
42. OTHER FAB. METAL PRODUCTS	0.35	0.40	0.44	0.49	0.53	0.56	9.92
43. ENGINES & TURBINES	0.01	0.02	0.02	0.02	0.02	0.02	7.73
44. FARM & GARDEN MACHINERY	0.01	0.01	0.01	0.01	0.01	0.01	8.11
45. CONSTR. & MINING MACHINERY	0.01	0.02	0.02	0.02	0.02	0.02	7.24
46. MATERIALS HANDLING MACH. & EQ.	0.02	0.03	0.03	0.03	0.04	0.04	9.12
47. METALWORKING MACH. & EQ.	0.23	0.26	0.29	0.32	0.35	0.36	9.36
48. SPECIAL INDUSTRY MACHINERY	0.01	0.01	0.01	0.01	0.01	0.01	12.06
49. GENERAL INDUSTRY MACHINERY	0.12	0.13	0.14	0.15	0.16	0.17	7.51
50. MISC. NONELECTRICAL MACH.	0.18	0.19	0.21	0.23	0.25	0.26	7.53
51. OFFICE,COMPUTING & ACCT. MACH.	0.06	0.07	0.07	0.08	0.08	0.08	7.32
52. SERVICE INDUSTRY MACHINES	0.07	0.09	0.09	0.11	0.12	0.14	13.37
53. ELECTRICAL MACHINERY	0.24	0.28	0.30	0.33	0.36	0.37	9.01
54. HOUSEHOLD APPLIANCES	0.01	0.01	0.01	0.02	0.02	0.02	9.51
55. ELECTRIC LIGHTING & WIRING EQ.	0.19	0.22	0.23	0.25	0.27	0.29	8.25
56. RADIO,TV, & COMMUNICATION EQ.	1.03	1.18	1.30	1.41	1.48	1.51	8.01
57. ELECTRONIC COMPONENTS & ACCESS.	0.41	0.49	0.55	0.61	0.67	0.70	11.37
58. MISC. ELECTRICAL MACH. & EQ.	0.09	0.11	0.12	0.13	0.14	0.15	9.57
59. MOTOR VEHICLES & EQUIPMENT	0.44	0.53	0.60	0.71	0.84	0.98	17.14
60. AIRCRAFT & PARTS	0.60	0.68	0.75	0.83	0.89	0.91	8.58
61. OTHER TRANSPORTATION EQ.	0.67	0.72	0.75	0.77	0.80	0.83	4.40
62. INSTRUMENTS & SUPPLIES	0.36	0.41	0.44	0.49	0.52	0.54	8.30
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.06	0.06	0.07	0.08	0.08	0.09	8.44
64. MISC. MANUFACTURING	0.05	0.06	0.06	0.07	0.07	0.07	6.06
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.02	0.02	0.02	0.02	0.02	0.02	6.03
TOTAL, ALL INDUSTRIES	9.79	11.04	11.98	13.08	13.97	14.63	8.36

TOTAL EMPLOYMENT

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
139. PUNCH PRESS OPERATORS, METAL
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
13. ORDNANCE & ACCESSORIES	1.05	1.08	1.10	1.13	1.15	1.17	2.18
22. HOUSEHOLD FURNITURE	2.33	2.46	2.54	2.62	2.68	2.71	3.03
23. OTHER FURNITURE & FIXTURES	5.14	5.19	5.36	5.53	5.65	5.78	2.38
25. PAPERBOARD CONTAINERS & BOXES	0.70	0.72	0.74	0.75	0.76	0.76	1.71
37. PRIMARY FERROUS METALS	1.22	1.25	1.29	1.31	1.31	1.30	1.30
38. NONFERROUS METALS	5.48	5.64	5.83	5.95	6.01	6.05	1.99
39. METAL CONTAINERS	4.04	3.99	4.00	4.07	4.09	4.12	0.36
40. FAB. STRUCTURAL METAL PRODUCTS	23.08	23.17	23.78	24.61	25.17	25.55	2.05
41. SCREW MACHINE PROD.&STAMPINGS	34.90	36.35	37.21	37.53	37.42	37.28	1.33
42. OTHER FAB. METAL PRODUCTS	7.56	7.81	8.16	8.43	8.64	8.85	3.20
43. ENGINES & TURBINES	0.18	0.19	0.19	0.19	0.20	0.20	1.79
44. FARM & GARDEN MACHINERY	3.07	3.15	3.31	3.36	3.39	3.43	2.27
45. CONSTR. & MINING MACHINERY	1.23	1.30	1.37	1.42	1.45	1.47	3.64
46. MATERIALS HANDLING MACH. & EQ.	0.44	0.45	0.48	0.50	0.51	0.53	3.62
47. METALWORKING MACH. & EQ.	4.48	4.67	4.94	5.14	5.29	5.39	3.76
48. SPECIAL INDUSTRY MACHINERY	0.95	0.97	1.01	1.06	1.08	1.11	3.22
49. GENERAL INDUSTRY MACHINERY	2.72	2.78	2.92	2.99	3.04	3.09	2.62
50. MISC. NONELECTRICAL MACH.	1.56	1.60	1.67	1.71	1.72	1.74	2.23
51. OFFICE,COMPUTING & ACCT. MACH.	1.58	1.65	1.72	1.75	1.77	1.81	2.73
52. SERVICE INDUSTRY MACHINES	4.08	4.25	4.45	4.52	4.53	4.53	2.10
53. ELECTRICAL MACHINERY	4.87	4.95	5.17	5.29	5.34	5.37	1.96
54. HOUSEHOLD APPLIANCES	4.85	4.98	5.11	5.29	5.40	5.48	2.48
55. ELECTRIC LIGHTING & WIRING EQ.	4.02	4.04	4.15	4.25	4.32	4.37	1.70
56. RADIO,TV, & COMMUNICATION EQ.	2.44	2.49	2.57	2.61	2.63	2.67	1.87
57. ELECTRONIC COMPONENTS & ACCESS.	1.87	1.95	2.04	2.13	2.19	2.23	3.65
58. MISC. ELECTRICAL MACH. & EQ.	3.46	3.52	3.72	3.76	3.81	3.84	2.12
59. MOTOR VEHICLES & EQUIPMENT	22.95	23.99	24.81	25.21	25.48	25.63	2.23
60. AIRCRAFT & PARTS	1.21	1.26	1.29	1.33	1.33	1.33	1.99
61. OTHER TRANSPORTATION EQ.	2.32	2.41	2.53	2.61	2.64	2.68	2.97
62. INSTRUMENTS & SUPPLIES	3.09	3.15	3.27	3.40	3.49	3.55	2.83
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	1.33	1.35	1.40	1.47	1.51	1.55	3.09
64. MISC. MANUFACTURING	4.82	4.90	5.06	5.20	5.29	5.33	2.02
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.27	0.28	0.29	0.29	0.30	0.30	2.10
TOTAL, ALL INDUSTRIES	163.57	168.26	173.76	177.69	179.91	181.49	2.10

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
140. WELDERS&FLAMECUTTERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
1. LIVESTOCK & PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	2.61
2. OTHER AGRICULTURAL PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	2.76
5. IRON ORE MINING	0.09	0.10	0.11	0.12	0.12	0.12	7.84
6. NONFERROUS METAL MINING	0.07	0.09	0.10	0.11	0.12	0.13	11.42
7. COAL MINING	0.18	0.21	0.23	0.25	0.27	0.29	9.54
8. CRUDE PETROLEUM & N. GAS	0.25	0.26	0.27	0.29	0.30	0.30	4.12
9. STONE&CLAY MINING & QUARRYING	0.06	0.07	0.08	0.09	0.10	0.10	10.10
10. CHEM&FERTILIZER MIN. MINING	0.01	0.01	0.01	0.01	0.01	0.01	7.90
11. NEW CONSTRUCTION	1.18	1.33	1.43	1.58	1.70	1.79	8.71
13. ORDNANCE & ACCESSORIES	3.49	3.99	4.40	4.81	5.12	5.36	8.96
20. LUMBER & WOOD PRODUCTS	0.04	0.04	0.05	0.05	0.06	0.06	11.01
22. HOUSEHOLD FURNITURE	0.01	0.01	0.01	0.02	0.02	0.02	3.69
23. OTHER FURNITURE & FIXTURES	0.11	0.11	0.12	0.13	0.13	0.14	4.81
24. PAPER & ALLIED PRODUCTS	0.04	0.05	0.05	0.06	0.06	0.06	6.60
27. CHEMICALS & PRODUCTS	0.14	0.16	0.17	0.19	0.20	0.21	8.00
28. PLASTICS & SYNTHETIC MATLS.	0.01	0.01	0.02	0.02	0.02	0.02	8.72
31. PET REFINING & REL. PROD.	0.09	0.10	0.10	0.11	0.12	0.12	5.17
32. RUBBER & MISC. PLASTICS PROD.	0.02	0.02	0.03	0.03	0.03	0.04	10.12
35. GLASS & GLASS PRODUCTS	0.01	0.01	0.01	0.01	0.02	0.02	11.76
36. STONE & CLAY PRODUCTS	0.12	0.13	0.14	0.16	0.17	0.18	8.35
37. PRIMARY FERROUS METALS	1.31	1.46	1.58	1.72	1.83	1.91	7.80
38. NONFERROUS METALS	0.40	0.46	0.50	0.56	0.60	0.63	9.69
39. METAL CONTAINERS	0.01	0.01	0.01	0.01	0.01	0.02	6.60
40. FAB. STRUCTURAL METAL PRODUCTS	2.55	2.86	3.04	3.25	3.43	3.60	7.15
41. SCREW MACHINE PROD.&STAMPINGS	0.74	0.83	0.89	0.98	1.04	1.08	7.68
42. OTHER FAB. METAL PRODUCTS	0.58	0.67	0.73	0.81	0.88	0.94	10.04
43. ENGINES & TURBINES	0.23	0.26	0.28	0.30	0.32	0.33	7.72
44. FARM & GARDEN MACHINERY	0.03	0.04	0.04	0.04	0.05	0.05	8.11
45. CONSTR. & MINING MACHINERY	0.38	0.42	0.46	0.49	0.52	0.54	7.24
46. MATERIALS HANDLING MACH. & EQ.	0.65	0.75	0.81	0.90	0.97	1.01	9.12
47. METALWORKING MACH. & EQ.	0.30	0.34	0.38	0.42	0.45	0.47	9.36
48. SPECIAL INDUSTRY MACHINERY	0.04	0.05	0.05	0.06	0.07	0.07	12.06
49. GENERAL INDUSTRY MACHINERY	0.41	0.46	0.50	0.53	0.57	0.59	7.51
50. MISC. NONELECTRICAL MACH.	1.31	1.42	1.56	1.72	1.82	1.88	7.54
51. OFFICE,COMPUTING & ACCT. MACH.	0.07	0.08	0.09	0.10	0.10	0.10	7.31
52. SERVICE INDUSTRY MACHINES	0.18	0.21	0.23	0.26	0.30	0.33	13.37
53. ELECTRICAL MACHINERY	0.34	0.38	0.42	0.46	0.49	0.51	8.88

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
140. WELDERS&FLAMECUTTERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
54. HOUSEHOLD APPLIANCES	0.01	0.01	0.01	0.01	0.01	0.01	9.51
55. ELECTRIC LIGHTING & WIRING EQ.	0.10	0.11	0.12	0.13	0.14	0.14	8.25
56. RADIO,TV, & COMMUNICATION EQ.	0.89	1.02	1.12	1.21	1.28	1.30	8.05
57. ELECTRONIC COMPONENTS & ACCESS.	0.42	0.50	0.57	0.63	0.69	0.72	11.36
58. MISC. ELECTRICAL MACH. & EQ.	0.06	0.07	0.08	0.08	0.09	0.10	9.58
59. MOTOR VEHICLES & EQUIPMENT	0.88	1.06	1.20	1.42	1.67	1.95	17.14
60. AIRCRAFT & PARTS	2.52	2.85	3.14	3.47	3.71	3.80	8.59
61. OTHER TRANSPORTATION EQ.	10.51	11.07	11.42	11.64	12.00	12.36	3.30
62. INSTRUMENTS & SUPPLIES	0.45	0.50	0.55	0.60	0.64	0.66	8.23
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.03	0.04	0.04	0.04	0.05	0.05	8.45
64. MISC. MANUFACTURING	0.03	0.03	0.04	0.04	0.04	0.04	4.97
65. TRANSPORTATION & WAREHOUSING	0.35	0.36	0.38	0.39	0.41	0.41	3.26
68. UTILITIES	0.14	0.15	0.16	0.17	0.18	0.18	6.05
69. WHOLESALE & RETAIL TRADE	0.07	0.08	0.09	0.10	0.11	0.11	9.19
72. PERSONAL SERVICES EXC. AUTO.	0.76	0.88	1.00	1.13	1.24	1.34	12.10
73. BUSINESS SERVICES	0.07	0.08	0.09	0.10	0.10	0.11	9.63
75. AUTOMOBILE REPAIR & SERVICE	0.10	0.12	0.12	0.13	0.14	0.15	6.79
77. MISC. SERVICES	0.02	0.02	0.02	0.02	0.02	0.02	2.54
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	2.93	3.12	3.30	3.48	3.61	3.69	4.69
82. GOVERNMENT INDUSTRY	5.82	5.72	5.84	6.02	6.13	6.18	1.19
TOTAL, ALL INDUSTRIES	41.67	45.26	48.23	51.50	54.31	56.42	6.25
TOTAL EMPLOYMENT							
1. LIVESTOCK & PRODUCTS	1.05	1.06	1.05	1.03	1.02	1.01	-0.80
2. OTHER AGRICULTURAL PRODUCTS	7.62	7.65	7.68	7.65	7.64	7.63	0.02
5. IRON ORE MINING	1.68	1.80	1.92	1.90	1.86	1.82	1.68
6. NONFERROUS METAL MINING	1.27	1.35	1.41	1.45	1.45	1.46	2.81
7. COAL MINING	6.46	6.83	7.12	7.33	7.60	7.79	3.82
8. CRUDE PETROLEUM & N. GAS	3.36	3.35	3.34	3.28	3.23	3.25	-0.66
9. STONE&CLAY MINING & QUARRYING	2.03	2.07	2.14	2.24	2.29	2.31	2.69
10. CHEM&FERTILIZER MIN. MINING	0.44	0.45	0.47	0.48	0.48	0.48	2.00
11. NEW CONSTRUCTION	31.31	31.99	32.65	33.71	34.54	35.04	2.28
13. ORDNANCE & ACCESSORIES	5.78	5.98	6.15	6.35	6.50	6.63	2.79
20. LUMBER & WOOD PRODUCTS	1.79	1.97	2.09	2.21	2.27	2.29	5.08
22. HOUSEHOLD FURNITURE	2.21	2.33	2.41	2.49	2.54	2.57	3.03
23. OTHER FURNITURE & FIXTURES	6.88	6.95	7.18	7.41	7.58	7.75	2.39
24. PAPER & ALLIED PRODUCTS	2.39	2.46	2.49	2.50	2.49	2.49	0.77
27. CHEMICALS & PRODUCTS	3.00	3.07	3.12	3.17	3.19	3.22	1.46

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
140. WELDERS&FLAMECUTTERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
28. PLASTICS & SYNTHETIC MATLS.	0.54	0.56	0.58	0.59	0.60	0.60	2.32
31. PET REFINING & REL. PROD.	1.74	1.74	1.75	1.76	1.77	1.76	0.23
32. RUBBER & MISC. PLASTICS PROD.	0.80	0.83	0.86	0.88	0.91	0.91	2.71
35. GLASS & GLASS PRODUCTS	0.43	0.45	0.47	0.48	0.49	0.49	2.86
36. STONE & CLAY PRODUCTS	3.65	3.73	3.79	3.89	3.91	3.86	1.11
37. PRIMARY FERROUS METALS	18.42	18.97	19.56	19.80	19.86	19.77	1.43
38. NONFERROUS METALS	4.68	4.87	5.09	5.25	5.36	5.45	3.08
39. METAL CONTAINERS	0.76	0.75	0.75	0.76	0.77	0.77	0.35
40. FAB. STRUCTURAL METAL PRODUCTS	57.17	57.03	58.16	59.84	60.86	61.42	1.44
41. SCREW MACHINE PROD.&STAMPINGS	12.14	12.75	13.16	13.38	13.45	13.50	2.15
42. OTHER FAB. METAL PRODUCTS	12.62	13.05	13.66	14.13	14.49	14.86	3.32
43. ENGINES & TURBINES	2.73	2.82	2.93	2.96	2.97	2.99	1.78
44. FARM & GARDEN MACHINERY	10.15	10.42	10.95	11.11	11.23	11.36	2.27
45. CONSTR. & MINING MACHINERY	32.08	33.91	35.68	36.95	37.94	38.36	3.64
46. MATERIALS HANDLING MACH. & EQ.	11.47	11.83	12.55	13.06	13.42	13.70	3.62
47. METALWORKING MACH. & EQ.	5.79	6.03	6.39	6.65	6.84	6.97	3.76
48. SPECIAL INDUSTRY MACHINERY	5.72	5.85	6.14	6.41	6.57	6.71	3.22
49. GENERAL INDUSTRY MACHINERY	9.36	9.60	10.05	10.32	10.49	10.66	2.62
50. MISC. NONELECTRICAL MACH.	11.42	11.72	12.22	12.49	12.61	12.75	2.23
51. OFFICE,COMPUTING & ACCT. MACH.	1.90	1.98	2.06	2.10	2.13	2.18	2.72
52. SERVICE INDUSTRY MACHINES	9.88	10.27	10.76	10.94	10.96	10.97	2.10
53. ELECTRICAL MACHINERY	6.74	6.84	7.14	7.28	7.35	7.39	1.85
54. HOUSEHOLD APPLIANCES	2.93	3.01	3.09	3.19	3.26	3.31	2.48
55. ELECTRIC LIGHTING & WIRING EQ.	2.03	2.04	2.10	2.15	2.18	2.21	1.70
56. RADIO,TV, & COMMUNICATION EQ.	2.10	2.15	2.21	2.25	2.27	2.30	1.90
57. ELECTRONIC COMPONENTS & ACCESS.	1.93	2.01	2.11	2.19	2.26	2.30	3.64
58. MISC. ELECTRICAL MACH. & EQ.	2.23	2.31	2.40	2.43	2.46	2.48	2.12
59. MOTOR VEHICLES & EQUIPMENT	45.72	47.80	49.42	50.21	50.76	51.05	2.23
60. AIRCRAFT & PARTS	5.05	5.25	5.39	5.56	5.57	5.57	1.99
61. OTHER TRANSPORTATION EQ.	36.26	37.32	38.61	39.43	39.50	39.82	1.89
62. INSTRUMENTS & SUPPLIES	3.83	3.89	4.05	4.21	4.32	4.39	2.77
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.77	0.78	0.81	0.84	0.87	0.89	3.09
64. MISC. MANUFACTURING	2.86	2.87	2.94	2.99	3.01	3.00	0.98
65. TRANSPORTATION & WAREHOUSING	8.18	8.27	8.35	8.46	8.42	8.33	0.37
68. UTILITIES	6.40	6.41	6.42	6.42	6.43	6.43	0.10
69. WHOLESALE & RETAIL TRADE	11.78	12.11	12.44	12.71	12.91	13.12	2.17
72. PERSONAL SERVICES EXC. AUTO.	41.29	43.60	46.10	48.62	51.16	53.58	5.35
73. BUSINESS SERVICES	1.41	1.47	1.54	1.61	1.68	1.74	4.18
75. AUTOMOBILE REPAIR & SERVICE	7.21	7.31	7.34	7.35	7.36	7.39	0.51

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
140. WELDERS&FLAMECUTTERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
77. MISC. SERVICES	2.73	2.73	2.73	2.75	2.78	2.82	0.61
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	35.90	36.94	38.20	39.21	39.89	40.41	2.40
82. GOVERNMENT INDUSTRY	14.33	14.29	14.43	14.68	14.92	15.15	1.12
TOTAL, ALL INDUSTRIES	534.62	550.12	568.89	583.82	594.00	601.80	2.40

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
141. METALWORKING OPERATIVES NEC
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	0.10	0.11	0.12	0.13	0.13	0.14	6.79
36. STONE & CLAY PRODUCTS	0.03	0.04	0.04	0.04	0.04	0.05	8.29
37. PRIMARY FERROUS METALS	0.97	1.08	1.17	1.27	1.35	1.41	7.66
38. NONFERROUS METALS	1.11	1.27	1.39	1.52	1.63	1.70	8.95
40. FAB. STRUCTURAL METAL PRODUCTS	0.06	0.07	0.08	0.09	0.09	0.10	8.24
41. SCREW MACHINE PROD.&STAMPINGS	0.05	0.05	0.06	0.06	0.07	0.07	7.70
42. OTHER FAB. METAL PRODUCTS	0.15	0.17	0.19	0.21	0.22	0.23	8.77
43. ENGINES & TURBINES	0.01	0.01	0.01	0.01	0.01	0.01	7.77
46. MATERIALS HANDLING MACH. & EQ.	0.01	0.01	0.01	0.01	0.01	0.01	9.12
47. METALWORKING MACH. & EQ.	0.02	0.02	0.02	0.02	0.03	0.03	9.37
49. GENERAL INDUSTRY MACHINERY	0.02	0.02	0.02	0.03	0.03	0.03	7.50
50. MISC. NONELECTRICAL MACH.	0.01	0.01	0.01	0.01	0.02	0.02	7.55
51. OFFICE,COMPUTING & ACCT. MACH.	0.01	0.01	0.01	0.01	0.02	0.02	7.37
53. ELECTRICAL MACHINERY	0.05	0.05	0.06	0.06	0.07	0.07	9.26
55. ELECTRIC LIGHTING & WIRING EQ.	0.02	0.02	0.02	0.02	0.02	0.02	8.23
56. RADIO,TV, & COMMUNICATION EQ.	0.14	0.17	0.18	0.20	0.21	0.21	8.18
57. ELECTRONIC COMPONENTS & ACCESS.	0.66	0.78	0.88	0.98	1.07	1.12	11.37
60. AIRCRAFT & PARTS	0.14	0.15	0.17	0.19	0.20	0.20	8.59
61. OTHER TRANSPORTATION EQ.	0.05	0.05	0.05	0.05	0.05	0.06	4.31
62. INSTRUMENTS & SUPPLIES	0.05	0.06	0.07	0.07	0.08	0.08	8.68
64. MISC. MANUFACTURING	0.01	0.01	0.01	0.01	0.01	0.01	7.35
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.02	0.02	0.02	0.03	0.03	0.03	6.51
TOTAL, ALL INDUSTRIES	3.70	4.22	4.62	5.07	5.43	5.66	8.85
TOTAL EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	0.16	0.17	0.17	0.17	0.17	0.17	0.75
36. STONE & CLAY PRODUCTS	0.96	0.98	0.99	1.02	1.02	1.01	1.06
37. PRIMARY FERROUS METALS	13.64	14.03	14.45	14.60	14.63	14.55	1.30
38. NONFERROUS METALS	13.11	13.55	14.05	14.41	14.59	14.75	2.38
40. FAB. STRUCTURAL METAL PRODUCTS	1.45	1.46	1.51	1.57	1.61	1.64	2.47
41. SCREW MACHINE PROD.&STAMPINGS	0.80	0.84	0.87	0.88	0.88	0.89	2.17
42. OTHER FAB. METAL PRODUCTS	3.31	3.38	3.50	3.57	3.62	3.68	2.12
43. ENGINES & TURBINES	0.08	0.09	0.09	0.09	0.09	0.09	1.83
46. MATERIALS HANDLING MACH. & EQ.	0.12	0.12	0.13	0.13	0.14	0.14	3.62
47. METALWORKING MACH. & EQ.	0.34	0.36	0.38	0.39	0.41	0.41	3.77
49. GENERAL INDUSTRY MACHINERY	0.47	0.48	0.50	0.51	0.52	0.53	2.60

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
141. METALWORKING OPERATIVES NEC
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
50. MISC. NONELECTRICAL MACH.	0.10	0.10	0.10	0.11	0.11	0.11	2.24
51. OFFICE,COMPUTING & ACCT. MACH.	0.29	0.30	0.31	0.32	0.32	0.33	2.77
53. ELECTRICAL MACHINERY	0.92	0.94	0.98	1.00	1.02	1.02	2.20
55. ELECTRIC LIGHTING & WIRING EQ.	0.35	0.35	0.36	0.37	0.37	0.38	1.68
56. RADIO,TV, & COMMUNICATION EQ.	0.34	0.35	0.36	0.37	0.37	0.38	2.03
57. ELECTRONIC COMPONENTS & ACCESS.	3.00	3.12	3.28	3.41	3.51	3.58	3.65
60. AIRCRAFT & PARTS	0.27	0.28	0.29	0.30	0.30	0.30	1.99
61. OTHER TRANSPORTATION EQ.	0.16	0.16	0.17	0.18	0.18	0.18	2.88
62. INSTRUMENTS & SUPPLIES	0.47	0.48	0.50	0.52	0.54	0.55	3.20
64. MISC. MANUFACTURING	0.65	0.67	0.70	0.73	0.75	0.77	3.26
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.24	0.24	0.25	0.26	0.26	0.26	2.10
TOTAL, ALL INDUSTRIES	43.17	44.46	46.01	47.04	47.58	47.90	2.10

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
142. ALL OTHER OPERATIVES
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
1. LIVESTOCK & PRODUCTS	0.06	0.06	0.06	0.06	0.06	0.06	2.61
2. OTHER AGRICULTURAL PRODUCTS	0.10	0.10	0.10	0.11	0.11	0.11	2.47
3. FORESTRY & FISHERY PRODUCTS	0.06	0.07	0.07	0.08	0.08	0.09	5.96
4. AGR.,FORESTRY,&FISHERY SERV.	0.18	0.20	0.21	0.22	0.24	0.25	6.14
5. IRON ORE MINING	0.50	0.57	0.62	0.67	0.70	0.72	7.85
6. NONFERROUS METAL MINING	1.03	1.21	1.34	1.49	1.62	1.72	10.88
7. COAL MINING	2.34	2.65	2.90	3.16	3.43	3.59	8.93
8. CRUDE PETROLEUM & N. GAS	8.82	9.36	9.65	10.15	10.63	10.69	3.94
9. STONE&CLAY MINING & QUARRYING	1.02	1.15	1.25	1.41	1.54	1.64	9.94
10. CHEM&FERTILIZER MIN. MINING	0.15	0.16	0.18	0.19	0.21	0.21	7.91
11. NEW CONSTRUCTION	5.71	6.46	6.96	7.69	8.28	8.70	8.79
13. ORDNANCE & ACCESSORIES	11.75	13.30	14.50	15.69	16.56	17.20	7.92
14. FOOD & KINDRED PRODUCTS	5.33	5.77	6.06	6.40	6.65	6.79	4.96
15. TOBACCO MANUFACTURES	0.03	0.04	0.04	0.04	0.04	0.04	7.15
16. FABRIC,YARN & THREAD MILLS	3.23	3.45	3.62	3.82	3.99	4.10	4.91
17. MISC. TEXTILE GOODS	0.76	0.83	0.90	0.97	1.04	1.08	7.17
18. APPAREL	3.24	3.44	3.61	3.87	4.12	4.35	6.03
19. MISC. FABRICATED TEXTILE PROD.	3.01	3.18	3.32	3.52	3.65	3.79	4.72
20. LUMBER & WOOD PRODUCTS	3.43	3.88	4.18	4.57	4.97	5.26	8.94
21. WOOD CONTAINERS	0.96	1.11	1.22	1.34	1.45	1.53	9.82
22. HOUSEHOLD FURNITURE	0.62	0.66	0.71	0.74	0.76	0.74	3.70
23. OTHER FURNITURE & FIXTURES	0.62	0.65	0.67	0.71	0.75	0.78	4.70
24. PAPER & ALLIED PRODUCTS	3.51	3.86	4.17	4.48	4.72	4.87	6.78
25. PAPERBOARD CONTAINERS & BOXES	1.92	2.15	2.35	2.58	2.77	2.90	8.62
26. PRINTING & PUBLISHING	3.54	3.80	4.03	4.31	4.49	4.58	5.28
27. CHEMICALS & PRODUCTS	6.07	6.66	7.12	7.69	8.23	8.59	7.19
28. PLASTICS & SYNTHETIC MATLS.	1.75	1.95	2.15	2.37	2.53	2.63	8.46
29. DRUGS,CLEANING & TOILET PREP.	0.25	0.26	0.27	0.29	0.29	0.30	3.53
30. PAINTS & ALLIED PRODUCTS	0.91	1.00	1.09	1.18	1.27	1.33	7.97
31. PET REFINING & REL. PROD.	2.18	2.30	2.42	2.58	2.71	2.78	4.95
32. RUBBER & MISC. PLASTICS PROD.	9.01	10.18	11.32	12.70	13.90	14.68	10.27
33. LEATHER TANNING & FINISHING	0.05	0.05	0.05	0.06	0.06	0.06	5.38
34. FOOTWEAR & OTHER LEATHER PROD.	0.32	0.34	0.36	0.38	0.40	0.41	5.41
35. GLASS & GLASS PRODUCTS	1.78	2.01	2.20	2.44	2.63	2.79	9.39
36. STONE & CLAY PRODUCTS	5.54	6.33	6.81	7.52	8.08	8.49	8.91
37. PRIMARY FERROUS METALS	8.46	9.44	10.22	11.17	11.93	12.47	8.08
38. NONFERROUS METALS	8.80	10.10	11.11	12.26	13.22	13.85	9.49

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
142. ALL OTHER OPERATIVES
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
39. METAL CONTAINERS	0.29	0.31	0.33	0.36	0.38	0.40	6.61
40. FAB. STRUCTURAL METAL PRODUCTS	3.56	4.01	4.30	4.63	4.92	5.19	7.81
41. SCREW MACHINE PROD.&STAMPINGS	2.58	2.89	3.11	3.40	3.61	3.76	7.80
42. OTHER FAB. METAL PRODUCTS	3.39	3.86	4.21	4.65	5.02	5.28	9.27
43. ENGINES & TURBINES	0.84	0.94	1.03	1.09	1.14	1.19	7.30
44. FARM & GARDEN MACHINERY	0.04	0.05	0.05	0.06	0.06	0.06	7.28
45. CONSTR. & MINING MACHINERY	0.23	0.26	0.28	0.30	0.32	0.33	7.38
46. MATERIALS HANDLING MACH. & EQ.	0.39	0.45	0.49	0.54	0.58	0.61	9.25
47. METALWORKING MACH. & EQ.	0.99	1.13	1.24	1.36	1.46	1.51	8.81
48. SPECIAL INDUSTRY MACHINERY	0.13	0.15	0.16	0.19	0.21	0.22	11.32
49. GENERAL INDUSTRY MACHINERY	0.92	1.02	1.10	1.18	1.25	1.29	7.15
50. MISC. NONELECTRICAL MACH.	1.35	1.47	1.60	1.75	1.85	1.90	6.96
51. OFFICE,COMPUTING & ACCT. MACH.	0.47	0.53	0.57	0.61	0.63	0.65	6.73
52. SERVICE INDUSTRY MACHINES	0.26	0.30	0.33	0.38	0.43	0.48	13.37
53. ELECTRICAL MACHINERY	2.18	2.48	2.71	2.97	3.19	3.33	8.89
54. HOUSEHOLD APPLIANCES	0.05	0.06	0.07	0.07	0.08	0.08	9.50
55. ELECTRIC LIGHTING & WIRING EQ.	1.29	1.45	1.55	1.70	1.82	1.90	7.95
56. RADIO,TV, & COMMUNICATION EQ.	20.21	23.13	25.31	27.33	28.65	29.18	7.63
57. ELECTRONIC COMPONENTS & ACCESS.	12.99	15.37	17.20	19.13	20.75	21.62	10.72
58. MISC. ELECTRICAL MACH. & EQ.	0.69	0.79	0.86	0.95	1.03	1.08	9.57
59. MOTOR VEHICLES & EQUIPMENT	2.63	3.14	3.57	4.24	4.97	5.81	17.14
60. AIRCRAFT & PARTS	19.10	21.50	23.59	25.91	27.59	28.20	8.11
61. OTHER TRANSPORTATION EQ.	9.22	9.72	10.04	10.25	10.58	10.90	3.42
62. INSTRUMENTS & SUPPLIES	5.53	6.24	6.81	7.47	7.96	8.25	8.34
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	1.13	1.24	1.35	1.48	1.60	1.68	8.30
64. MISC. MANUFACTURING	1.10	1.21	1.28	1.38	1.46	1.50	6.36
65. TRANSPORTATION & WAREHOUSING	44.05	47.30	50.16	54.00	56.95	58.82	5.95
66. COMMUNICATION EXC. RADIO & TV	0.13	0.13	0.14	0.15	0.16	0.17	5.65
67. RADIO & TV BROADCASTING	0.01	0.01	0.01	0.01	0.01	0.01	8.15
68. UTILITIES	0.88	0.98	1.06	1.15	1.21	1.24	7.04
69. WHOLESALE & RETAIL TRADE	12.58	14.15	15.51	17.10	18.42	19.29	8.92
70. FINANCE & INSURANCE	0.05	0.06	0.07	0.07	0.08	0.08	9.38
71. REAL ESTATE & RENTAL	0.07	0.08	0.09	0.10	0.11	0.11	8.67
72. PERSONAL SERVICES EXC. AUTO.	6.94	7.66	8.17	8.78	9.21	9.50	6.48
73. BUSINESS SERVICES	7.62	8.52	9.32	10.25	10.95	11.35	8.30
74. EATING & DRINKING PLACES	0.41	0.47	0.53	0.58	0.63	0.66	9.76
75. AUTOMOBILE REPAIR & SERVICE	1.70	1.89	2.05	2.23	2.39	2.47	7.75
76. AMUSEMENTS	0.12	0.14	0.15	0.16	0.18	0.19	8.54
77. MISC. SERVICES	2.29	2.36	2.46	2.61	2.73	2.80	4.08

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
142. ALL OTHER OPERATIVES
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	16.04	17.20	18.27	19.45	20.25	20.68	5.22
82. GOVERNMENT INDUSTRY	34.62	34.05	34.82	35.89	36.59	36.95	1.31
TOTAL, ALL INDUSTRIES	326.12	357.45	383.80	414.81	439.52	454.95	6.89
TOTAL EMPLOYMENT							
1. LIVESTOCK & PRODUCTS	9.17	9.25	9.10	8.94	8.88	8.80	-0.80
2. OTHER AGRICULTURAL PRODUCTS	66.03	66.10	66.21	65.79	65.46	65.17	-0.26
3. FORESTRY & FISHERY PRODUCTS	2.56	2.70	2.87	2.99	3.00	2.96	3.00
4. AGR.,FORESTRY,&FISHERY SERV.	9.90	10.10	10.13	10.29	10.34	10.44	1.08
5. IRON ORE MINING	9.71	10.42	11.14	11.02	10.80	10.56	1.69
6. NONFERROUS METAL MINING	17.66	18.62	19.34	19.82	19.68	19.79	2.31
7. COAL MINING	83.60	87.75	90.91	93.07	96.06	98.07	3.24
8. CRUDE PETROLEUM & N. GAS	119.45	119.02	118.44	115.89	113.94	114.54	-0.84
9. STONE&CLAY MINING & QUARRYING	32.41	33.09	34.20	35.64	36.42	36.74	2.54
10. CHEM&FERTILIZER MIN. MINING	7.24	7.42	7.67	7.85	7.92	7.99	2.01
11. NEW CONSTRUCTION	151.94	155.34	158.70	163.96	168.14	170.70	2.36
13. ORDNANCE & ACCESSORIES	19.44	19.89	20.26	20.74	21.03	21.27	1.81
14. FOOD & KINDRED PRODUCTS	797.45	807.42	811.36	807.55	798.74	791.35	-0.15
15. TOBACCO MANUFACTURES	26.41	26.41	26.08	25.67	25.38	24.92	-1.16
16. FABRIC,YARN & THREAD MILLS	258.89	266.02	272.58	277.39	279.32	279.15	1.52
17. MISC. TEXTILE GOODS	52.56	54.59	56.88	58.79	59.80	60.27	2.77
18. APPAREL	900.69	907.90	928.19	945.42	946.26	946.38	0.99
19. MISC. FABRICATED TEXTILE PROD.	101.96	104.57	107.42	109.51	110.86	111.98	1.89
20. LUMBER & WOOD PRODUCTS	165.80	179.47	186.31	193.24	195.16	193.35	3.12
21. WOOD CONTAINERS	16.10	16.07	16.38	16.79	16.96	17.06	1.16
22. HOUSEHOLD FURNITURE	106.94	112.79	116.48	120.39	123.01	124.16	3.03
23. OTHER FURNITURE & FIXTURES	39.04	39.36	40.62	41.87	42.79	43.69	2.28
24. PAPER & ALLIED PRODUCTS	188.53	194.36	196.67	197.57	197.62	197.57	0.94
25. PAPERBOARD CONTAINERS & BOXES	87.30	89.52	91.44	93.05	93.93	94.37	1.57
26. PRINTING & PUBLISHING	225.32	224.30	224.14	223.96	223.04	222.02	-0.29
27. CHEMICALS & PRODUCTS	126.05	127.86	129.29	130.03	130.29	130.49	0.69
28. PLASTICS & SYNTHETIC MATLS.	72.68	75.18	77.76	79.53	80.42	80.53	2.07
29. DRUGS,CLEANING & TOILET PREP.	70.90	70.93	71.59	72.03	71.63	71.42	0.15
30. PAINTS & ALLIED PRODUCTS	17.26	18.03	18.63	19.23	19.58	19.77	2.76
31. PET REFINING & REL. PROD.	40.51	40.35	40.49	40.75	40.71	40.56	0.03
32. RUBBER & MISC. PLASTICS PROD.	330.96	342.04	356.31	367.77	377.04	380.74	2.84
33. LEATHER TANNING & FINISHING	8.86	9.16	9.47	9.49	9.48	9.45	1.29
34. FOOTWEAR & OTHER LEATHER PROD.	120.64	121.13	121.82	121.62	120.82	120.06	-0.10

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
142. ALL OTHER OPERATIVES
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
35. GLASS & GLASS PRODUCTS	80.98	82.45	83.98	84.73	84.44	83.76	0.68
36. STONE & CLAY PRODUCTS	171.63	176.11	180.09	185.54	187.42	186.11	1.63
37. PRIMARY FERROUS METALS	118.68	122.62	126.77	128.64	129.40	129.11	1.70
38. NONFERROUS METALS	103.96	107.98	112.53	116.01	118.05	119.88	2.89
39. METAL CONTAINERS	19.63	19.36	19.40	19.74	19.87	19.98	0.36
40. FAB. STRUCTURAL METAL PRODUCTS	79.84	80.17	82.28	85.18	87.13	88.43	2.07
41. SCREW MACHINE PROD.&STAMPINGS	42.08	44.27	45.74	46.56	46.84	47.06	2.26
42. OTHER FAB. METAL PRODUCTS	73.70	75.65	78.63	80.75	82.23	83.79	2.60
43. ENGINES & TURBINES	10.04	10.32	10.66	10.73	10.75	10.75	1.38
44. FARM & GARDEN MACHINERY	13.20	13.43	14.01	14.10	14.15	14.21	1.49
45. CONSTR. & MINING MACHINERY	19.33	20.46	21.56	22.35	22.98	23.26	3.77
46. MATERIALS HANDLING MACH. & EQ.	6.91	7.14	7.58	7.90	8.13	8.31	3.75
47. METALWORKING MACH. & EQ.	19.28	19.96	21.04	21.78	22.30	22.61	3.24
48. SPECIAL INDUSTRY MACHINERY	17.85	18.11	18.88	19.60	19.94	20.23	2.53
49. GENERAL INDUSTRY MACHINERY	20.90	21.34	22.26	22.78	23.09	23.38	2.27
50. MISC. NONELECTRICAL MACH.	11.83	12.07	12.51	12.73	12.78	12.86	1.68
51. OFFICE,COMPUTING & ACCT. MACH.	12.41	12.82	13.29	13.45	13.57	13.81	2.16
52. SERVICE INDUSTRY MACHINES	14.29	14.85	15.56	15.81	15.85	15.85	2.10
53. ELECTRICAL MACHINERY	43.72	44.38	46.28	47.25	47.67	47.92	1.86
54. HOUSEHOLD APPLIANCES	21.31	21.89	22.48	23.25	23.75	24.08	2.48
55. ELECTRIC LIGHTING & WIRING EQ.	27.07	27.17	27.82	28.41	28.76	29.05	1.42
56. RADIO,TV, & COMMUNICATION EQ.	47.85	48.74	50.04	50.69	50.93	51.56	1.51
57. ELECTRONIC COMPONENTS & ACCESS.	59.32	61.48	64.16	66.37	67.88	68.93	3.05
58. MISC. ELECTRICAL MACH. & EQ.	25.30	26.18	27.22	27.53	27.87	28.10	2.12
59. MOTOR VEHICLES & EQUIPMENT	136.20	142.38	147.21	149.57	151.21	152.07	2.23
60. AIRCRAFT & PARTS	38.25	39.60	40.50	41.59	41.50	41.29	1.54
61. OTHER TRANSPORTATION EQ.	31.81	32.78	33.96	34.71	34.81	35.13	2.00
62. INSTRUMENTS & SUPPLIES	47.49	48.37	50.33	52.34	53.77	54.71	2.87
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	26.07	26.38	27.45	28.59	29.48	30.16	2.95
64. MISC. MANUFACTURING	99.73	101.62	105.25	108.58	110.64	111.80	2.31
65. TRANSPORTATION & WAREHOUSING	1,036.30	1,076.32	1,115.16	1,159.51	1,183.80	1,200.76	2.99
66. COMMUNICATION EXC. RADIO & TV	5.12	5.18	5.33	5.41	5.56	5.63	1.93
67. RADIO & TV BROADCASTING	0.35	0.36	0.37	0.38	0.38	0.38	1.71
68. UTILITIES	41.10	41.58	42.02	42.44	42.89	43.28	1.04
69. WHOLESALE & RETAIL TRADE	2,056.74	2,108.52	2,160.07	2,201.48	2,231.00	2,262.27	1.92
70. FINANCE & INSURANCE	6.10	6.20	6.33	6.49	6.66	6.83	2.29
71. REAL ESTATE & RENTAL	2.68	2.74	2.82	2.89	2.95	3.00	2.28
72. PERSONAL SERVICES EXC. AUTO.	378.73	377.68	378.36	379.13	379.91	379.83	0.06
73. BUSINESS SERVICES	157.03	161.45	166.48	172.48	177.48	181.38	2.93

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
142. ALL OTHER OPERATIVES
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
74. EATING & DRINKING PLACES	26.76	27.24	27.69	27.93	28.12	28.21	1.06
75. AUTOMOBILE REPAIR & SERVICE	117.50	120.40	122.07	123.22	124.47	126.02	1.41
76. AMUSEMENTS	12.74	12.93	13.30	13.63	13.98	14.31	2.35
77. MISC. SERVICES	355.11	359.87	365.63	374.00	383.68	394.51	2.13
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	453.33	463.33	473.88	482.90	487.86	491.50	1.63
82. GOVERNMENT INDUSTRY	272.42	270.66	271.90	274.79	277.75	281.44	0.65
TOTAL, ALL INDUSTRIES	10,652.96	10,888.06	11,136.10	11,347.84	11,464.51	11,550.14	1.63

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
143. BATCH PLANT OPERATIVES
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
36. STONE & CLAY PRODUCTS	0.20	0.23	0.25	0.28	0.30	0.32	9.39
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.02	0.02	0.02	0.02	0.02	0.02	6.80
TOTAL, ALL INDUSTRIES	0.22	0.26	0.28	0.31	0.33	0.35	9.18
TOTAL EMPLOYMENT							
36. STONE & CLAY PRODUCTS	6.32	6.52	6.69	6.93	7.03	7.01	2.08
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.57	0.59	0.61	0.63	0.64	0.63	2.01
TOTAL, ALL INDUSTRIES	7.05	7.26	7.45	7.71	7.81	7.79	2.01

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
144. BLASTERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
5. IRON ORE MINING	0.02	0.02	0.02	0.03	0.03	0.03	8.41
6. NONFERROUS METAL MINING	0.04	0.04	0.05	0.05	0.06	0.06	11.30
7. COAL MINING	0.09	0.10	0.11	0.12	0.14	0.14	9.22
8. CRUDE PETROLEUM & N. GAS	0.07	0.08	0.08	0.08	0.09	0.09	4.04
9. STONE&CLAY MINING & QUARRYING	0.02	0.03	0.03	0.03	0.04	0.04	10.42
11. NEW CONSTRUCTION	0.04	0.04	0.05	0.05	0.06	0.06	8.05
36. STONE & CLAY PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	7.55
82. GOVERNMENT INDUSTRY	1.00	0.97	0.99	1.01	1.03	1.03	0.69
TOTAL, ALL INDUSTRIES	1.31	1.32	1.36	1.42	1.46	1.49	2.59
TOTAL EMPLOYMENT							
5. IRON ORE MINING	0.37	0.40	0.43	0.42	0.42	0.41	2.21
6. NONFERROUS METAL MINING	0.61	0.65	0.68	0.69	0.69	0.70	2.70
7. COAL MINING	3.28	3.45	3.59	3.68	3.81	3.89	3.51
8. CRUDE PETROLEUM & N. GAS	0.97	0.97	0.96	0.94	0.93	0.93	-0.74
9. STONE&CLAY MINING & QUARRYING	0.77	0.79	0.82	0.86	0.88	0.89	2.98
11. NEW CONSTRUCTION	1.06	1.07	1.09	1.12	1.14	1.15	1.66
36. STONE & CLAY PRODUCTS	0.31	0.31	0.31	0.32	0.32	0.31	0.37
82. GOVERNMENT INDUSTRY	1.07	1.08	1.10	1.13	1.16	1.18	1.94
TOTAL, ALL INDUSTRIES	8.73	9.02	9.29	9.49	9.67	9.80	2.34

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
145. BORING MACHINE OPERATORS, WOOD
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
20. LUMBER & WOOD PRODUCTS	0.02	0.02	0.02	0.03	0.03	0.03	9.37
22. HOUSEHOLD FURNITURE	0.01	0.01	0.01	0.01	0.01	0.01	3.70
23. OTHER FURNITURE & FIXTURES	0.01	0.01	0.01	0.01	0.01	0.01	4.75
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.01	0.01	0.01	0.01	0.01	0.01	6.61
TOTAL, ALL INDUSTRIES	0.06	0.06	0.07	0.07	0.08	0.08	7.14
TOTAL EMPLOYMENT							
20. LUMBER & WOOD PRODUCTS	0.96	1.04	1.09	1.13	1.15	1.14	3.53
22. HOUSEHOLD FURNITURE	2.10	2.22	2.29	2.37	2.42	2.44	3.03
23. OTHER FURNITURE & FIXTURES	0.42	0.42	0.44	0.45	0.46	0.47	2.33
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.58	0.62	0.64	0.66	0.67	0.68	3.05
TOTAL, ALL INDUSTRIES	4.42	4.66	4.83	5.00	5.10	5.14	3.05

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
146. COIL FINISHERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
53. ELECTRICAL MACHINERY	0.12	0.14	0.16	0.17	0.18	0.19	8.96
56. RADIO,TV, & COMMUNICATION EQ.	0.11	0.13	0.14	0.15	0.16	0.16	7.59
57. ELECTRONIC COMPONENTS & ACCESS.	0.68	0.80	0.91	1.01	1.11	1.16	11.36
TOTAL, ALL INDUSTRIES	0.92	1.08	1.21	1.34	1.46	1.52	10.59
TOTAL EMPLOYMENT							
53. ELECTRICAL MACHINERY	2.51	2.55	2.66	2.72	2.74	2.76	1.91
56. RADIO,TV, & COMMUNICATION EQ.	0.26	0.26	0.27	0.27	0.28	0.28	1.47
57. ELECTRONIC COMPONENTS & ACCESS.	3.09	3.22	3.38	3.52	3.62	3.69	3.64
TOTAL, ALL INDUSTRIES	6.14	6.32	6.61	6.82	6.95	7.05	2.79

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
147. CUTTERS, MACHINE
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
16. FABRIC, YARN & THREAD MILLS	0.01	0.02	0.02	0.02	0.02	0.02	5.45
17. MISC. TEXTILE GOODS	0.02	0.02	0.02	0.02	0.02	0.02	7.15
18. APPAREL	0.02	0.02	0.03	0.03	0.03	0.03	6.00
19. MISC. FABRICATED TEXTILE PROD.	0.05	0.06	0.06	0.06	0.06	0.07	4.68
24. PAPER & ALLIED PRODUCTS	0.10	0.11	0.12	0.13	0.13	0.14	6.74
25. PAPERBOARD CONTAINERS & BOXES	0.03	0.03	0.03	0.04	0.04	0.04	8.79
26. PRINTING & PUBLISHING	0.10	0.11	0.12	0.12	0.13	0.13	5.62
28. PLASTICS & SYNTHETIC MATLS.	0.01	0.01	0.01	0.01	0.01	0.01	8.70
30. PAINTS & ALLIED PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	8.23
32. RUBBER & MISC. PLASTICS PROD.	0.06	0.06	0.07	0.08	0.09	0.09	9.95
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.01	0.01	0.01	0.02	0.02	0.02	5.73
TOTAL, ALL INDUSTRIES	0.43	0.47	0.50	0.55	0.58	0.60	6.77
TOTAL EMPLOYMENT							
16. FABRIC, YARN & THREAD MILLS	1.19	1.23	1.27	1.30	1.31	1.32	2.04
17. MISC. TEXTILE GOODS	1.18	1.23	1.28	1.32	1.34	1.35	2.75
18. APPAREL	6.27	6.32	6.46	6.58	6.58	6.58	0.97
19. MISC. FABRICATED TEXTILE PROD.	1.81	1.85	1.90	1.94	1.96	1.98	1.86
24. PAPER & ALLIED PRODUCTS	5.37	5.53	5.60	5.62	5.62	5.61	0.90
25. PAPERBOARD CONTAINERS & BOXES	1.28	1.32	1.35	1.37	1.39	1.40	1.72
26. PRINTING & PUBLISHING	6.44	6.43	6.45	6.46	6.46	6.45	0.03
28. PLASTICS & SYNTHETIC MATLS.	0.36	0.37	0.38	0.39	0.40	0.40	2.31
30. PAINTS & ALLIED PRODUCTS	0.15	0.16	0.16	0.17	0.17	0.17	3.00
32. RUBBER & MISC. PLASTICS PROD.	2.08	2.14	2.22	2.29	2.34	2.35	2.55
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.66	0.67	0.69	0.70	0.70	0.70	1.11
TOTAL, ALL INDUSTRIES	27.03	27.49	27.99	28.38	28.51	28.56	1.11

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
148. CUTTERS, PORTABLE MACHINE
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
16. FABRIC,YARN & THREAD MILLS	0.01	0.01	0.01	0.01	0.01	0.01	5.51
17. MISC. TEXTILE GOODS	0.01	0.01	0.01	0.01	0.01	0.01	7.14
18. APPAREL	0.04	0.05	0.05	0.05	0.06	0.06	6.00
19. MISC. FABRICATED TEXTILE PROD.	0.06	0.06	0.06	0.07	0.07	0.07	4.68
TOTAL, ALL INDUSTRIES	0.12	0.13	0.13	0.14	0.15	0.15	5.32
TOTAL EMPLOYMENT							
16. FABRIC,YARN & THREAD MILLS	0.48	0.50	0.52	0.53	0.53	0.54	2.10
17. MISC. TEXTILE GOODS	0.45	0.46	0.48	0.50	0.51	0.51	2.74
18. APPAREL	12.36	12.46	12.73	12.96	12.97	12.97	0.97
19. MISC. FABRICATED TEXTILE PROD.	1.94	1.99	2.04	2.08	2.11	2.13	1.86
TOTAL, ALL INDUSTRIES	15.64	15.82	16.19	16.50	16.55	16.57	1.17

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
149. CUTTER-FINISH OPER.,RUBBER GOODS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
32. RUBBER & MISC. PLASTICS PROD.	0.19	0.21	0.23	0.26	0.28	0.30	9.79
TOTAL, ALL INDUSTRIES	0.19	0.22	0.24	0.27	0.29	0.31	9.73
TOTAL EMPLOYMENT							
32. RUBBER & MISC. PLASTICS PROD.	6.87	7.07	7.33	7.53	7.69	7.74	2.40
TOTAL, ALL INDUSTRIES	7.06	7.26	7.53	7.74	7.90	7.95	2.40

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
150. DIE CUTTERS&CLICKING MACH. OPER.
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
18. APPAREL	0.01	0.01	0.01	0.01	0.01	0.01	6.26
19. MISC. FABRICATED TEXTILE PROD.	0.01	0.01	0.01	0.01	0.01	0.02	4.69
24. PAPER & ALLIED PRODUCTS	0.07	0.07	0.08	0.09	0.09	0.10	8.09
25. PAPERBOARD CONTAINERS & BOXES	0.05	0.06	0.06	0.07	0.07	0.08	8.78
32. RUBBER & MISC. PLASTICS PROD.	0.04	0.04	0.05	0.05	0.06	0.06	9.36
34. FOOTWEAR & OTHER LEATHER PROD.	0.02	0.02	0.02	0.03	0.03	0.03	5.11
TOTAL, ALL INDUSTRIES	0.20	0.22	0.24	0.26	0.28	0.29	7.92
TOTAL EMPLOYMENT							
18. APPAREL	1.62	1.63	1.67	1.71	1.71	1.72	1.21
19. MISC. FABRICATED TEXTILE PROD.	0.41	0.42	0.43	0.44	0.44	0.45	1.87
24. PAPER & ALLIED PRODUCTS	3.51	3.66	3.75	3.82	3.86	3.91	2.18
25. PAPERBOARD CONTAINERS & BOXES	2.27	2.33	2.38	2.43	2.45	2.47	1.72
32. RUBBER & MISC. PLASTICS PROD.	1.45	1.49	1.54	1.57	1.60	1.60	1.99
34. FOOTWEAR & OTHER LEATHER PROD.	8.12	8.13	8.15	8.12	8.04	7.97	-0.38
TOTAL, ALL INDUSTRIES	17.94	18.24	18.52	18.68	18.71	18.71	0.84

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
151. DRILLERS, HAND&MACHINE
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
5. IRON ORE MINING	0.06	0.07	0.08	0.08	0.09	0.09	8.33
6. NONFERROUS METAL MINING	0.17	0.20	0.22	0.24	0.26	0.27	10.03
7. COAL MINING	0.14	0.16	0.17	0.19	0.21	0.21	9.16
9. STONE&CLAY MINING & QUARRYING	0.07	0.08	0.09	0.10	0.11	0.12	10.66
10. CHEM&FERTILIZER MIN. MINING	0.01	0.01	0.01	0.02	0.02	0.02	7.92
11. NEW CONSTRUCTION	0.06	0.07	0.08	0.08	0.09	0.09	8.44
36. STONE & CLAY PRODUCTS	0.02	0.02	0.02	0.03	0.03	0.03	8.89
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.11	0.13	0.14	0.15	0.16	0.16	7.62
TOTAL, ALL INDUSTRIES	0.65	0.74	0.81	0.89	0.95	1.00	9.12
TOTAL EMPLOYMENT							
5. IRON ORE MINING	1.20	1.29	1.39	1.38	1.36	1.33	2.15
6. NONFERROUS METAL MINING	2.91	3.04	3.14	3.19	3.14	3.14	1.53
7. COAL MINING	4.95	5.21	5.41	5.55	5.74	5.87	3.46
9. STONE&CLAY MINING & QUARRYING	2.23	2.29	2.38	2.50	2.57	2.61	3.21
10. CHEM&FERTILIZER MIN. MINING	0.59	0.60	0.62	0.64	0.65	0.65	2.02
11. NEW CONSTRUCTION	1.66	1.69	1.72	1.77	1.81	1.84	2.02
36. STONE & CLAY PRODUCTS	0.62	0.64	0.65	0.67	0.68	0.67	1.62
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	2.71	2.83	2.94	3.01	3.06	3.09	2.62
TOTAL, ALL INDUSTRIES	16.87	17.60	18.25	18.71	19.00	19.20	2.62

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE
BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
152. FILERS, GRINDERS, BUFFERS&CHIPPERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
11. NEW CONSTRUCTION	0.02	0.02	0.02	0.03	0.03	0.03	9.40
13. ORDNANCE & ACCESSORIES	0.62	0.71	0.77	0.84	0.89	0.92	8.15
23. OTHER FURNITURE & FIXTURES	0.01	0.01	0.01	0.02	0.02	0.02	4.72
32. RUBBER & MISC. PLASTICS PROD.	0.02	0.03	0.03	0.03	0.04	0.04	10.39
36. STONE & CLAY PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.02	8.55
37. PRIMARY FERROUS METALS	0.87	0.98	1.08	1.19	1.29	1.36	9.33
38. NONFERROUS METALS	0.48	0.54	0.59	0.64	0.69	0.71	8.41
40. FAB. STRUCTURAL METAL PRODUCTS	0.48	0.55	0.59	0.64	0.68	0.72	8.25
41. SCREW MACHINE PROD.&STAMPINGS	0.19	0.21	0.23	0.25	0.27	0.28	7.69
42. OTHER FAB. METAL PRODUCTS	0.42	0.48	0.52	0.57	0.61	0.64	8.52
43. ENGINES & TURBINES	0.15	0.17	0.19	0.20	0.21	0.22	7.72
45. CONSTR. & MINING MACHINERY	0.03	0.04	0.04	0.04	0.05	0.05	8.17
46. MATERIALS HANDLING MACH. & EQ.	0.05	0.06	0.07	0.08	0.08	0.09	10.06
47. METALWORKING MACH. & EQ.	0.24	0.27	0.30	0.33	0.36	0.37	9.36
48. SPECIAL INDUSTRY MACHINERY	0.01	0.01	0.02	0.02	0.02	0.02	12.06
49. GENERAL INDUSTRY MACHINERY	0.14	0.16	0.17	0.19	0.20	0.21	7.51
50. MISC. NONELECTRICAL MACH.	0.27	0.30	0.33	0.36	0.38	0.39	7.54
51. OFFICE,COMPUTING & ACCT. MACH.	0.05	0.05	0.06	0.06	0.06	0.07	7.32
52. SERVICE INDUSTRY MACHINES	0.02	0.02	0.02	0.03	0.03	0.04	13.36
53. ELECTRICAL MACHINERY	0.07	0.08	0.09	0.10	0.11	0.11	8.98
55. ELECTRIC LIGHTING & WIRING EQ.	0.04	0.04	0.04	0.05	0.05	0.05	8.24
56. RADIO,TV, & COMMUNICATION EQ.	0.35	0.40	0.44	0.48	0.50	0.51	7.75
57. ELECTRONIC COMPONENTS & ACCESS.	0.29	0.35	0.39	0.44	0.48	0.50	11.37
58. MISC. ELECTRICAL MACH. & EQ.	0.01	0.01	0.01	0.01	0.01	0.01	9.59
59. MOTOR VEHICLES & EQUIPMENT	0.17	0.20	0.23	0.27	0.32	0.38	17.14
60. AIRCRAFT & PARTS	4.41	4.99	5.50	6.07	6.49	6.67	8.59
61. OTHER TRANSPORTATION EQ.	1.22	1.28	1.32	1.35	1.39	1.44	3.40
62. INSTRUMENTS & SUPPLIES	0.30	0.34	0.37	0.41	0.44	0.45	8.64
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.06	0.06	0.07	0.07	0.08	0.09	8.55
64. MISC. MANUFACTURING	0.04	0.04	0.04	0.05	0.05	0.05	6.40
69. WHOLESALE & RETAIL TRADE	0.01	0.02	0.02	0.02	0.02	0.02	9.22
72. PERSONAL SERVICES EXC. AUTO.	0.14	0.16	0.18	0.21	0.23	0.25	12.32
73. BUSINESS SERVICES	0.01	0.01	0.01	0.01	0.01	0.01	8.79
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.14	0.15	0.16	0.17	0.17	0.18	5.54
TOTAL, ALL INDUSTRIES	11.39	12.81	13.97	15.27	16.30	16.94	8.27

TOTAL EMPLOYMENT

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
152. FILERS, GRINDERS, BUFFERS&CHIPPERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
11. NEW CONSTRUCTION	0.49	0.51	0.52	0.54	0.56	0.57	2.93
13. ORDNANCE & ACCESSORIES	1.03	1.06	1.08	1.11	1.13	1.14	2.03
23. OTHER FURNITURE & FIXTURES	0.87	0.88	0.90	0.93	0.95	0.97	2.29
32. RUBBER & MISC. PLASTICS PROD.	0.84	0.86	0.90	0.93	0.96	0.97	2.95
36. STONE & CLAY PRODUCTS	0.32	0.33	0.34	0.34	0.35	0.34	1.30
37. PRIMARY FERROUS METALS	12.20	12.77	13.36	13.72	13.95	14.06	2.87
38. NONFERROUS METALS	5.62	5.78	5.96	6.09	6.14	6.17	1.88
40. FAB. STRUCTURAL METAL PRODUCTS	10.84	10.94	11.27	11.72	12.03	12.26	2.49
41. SCREW MACHINE PROD.&STAMPINGS	3.12	3.28	3.38	3.44	3.46	3.47	2.16
42. OTHER FAB. METAL PRODUCTS	9.23	9.40	9.70	9.90	10.01	10.14	1.89
43. ENGINES & TURBINES	1.81	1.87	1.94	1.96	1.97	1.98	1.78
45. CONSTR. & MINING MACHINERY	2.70	2.88	3.06	3.20	3.31	3.37	4.53
46. MATERIALS HANDLING MACH. & EQ.	0.97	1.01	1.08	1.13	1.17	1.20	4.51
47. METALWORKING MACH. & EQ.	4.62	4.81	5.09	5.30	5.45	5.56	3.76
48. SPECIAL INDUSTRY MACHINERY	1.79	1.83	1.92	2.00	2.05	2.09	3.21
49. GENERAL INDUSTRY MACHINERY	3.28	3.36	3.52	3.61	3.67	3.73	2.62
50. MISC. NONELECTRICAL MACH.	2.38	2.44	2.55	2.60	2.63	2.66	2.23
51. OFFICE,COMPUTING & ACCT. MACH.	1.21	1.26	1.31	1.34	1.36	1.39	2.72
52. SERVICE INDUSTRY MACHINES	1.05	1.09	1.14	1.16	1.16	1.16	2.10
53. ELECTRICAL MACHINERY	1.43	1.46	1.52	1.55	1.57	1.58	1.93
55. ELECTRIC LIGHTING & WIRING EQ.	0.74	0.74	0.76	0.78	0.79	0.80	1.69
56. RADIO,TV, & COMMUNICATION EQ.	0.83	0.85	0.87	0.88	0.89	0.90	1.63
57. ELECTRONIC COMPONENTS & ACCESS.	1.33	1.39	1.46	1.51	1.56	1.59	3.65
58. MISC. ELECTRICAL MACH. & EQ.	0.32	0.33	0.34	0.34	0.35	0.35	2.13
59. MOTOR VEHICLES & EQUIPMENT	8.82	9.22	9.53	9.68	9.79	9.85	2.23
60. AIRCRAFT & PARTS	8.84	9.20	9.45	9.74	9.77	9.76	2.00
61. OTHER TRANSPORTATION EQ.	4.20	4.32	4.48	4.58	4.59	4.63	1.99
62. INSTRUMENTS & SUPPLIES	2.57	2.62	2.74	2.86	2.94	3.00	3.15
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	1.30	1.32	1.38	1.44	1.49	1.52	3.19
64. MISC. MANUFACTURING	3.47	3.53	3.66	3.78	3.85	3.89	2.35
69. WHOLESALE & RETAIL TRADE	2.42	2.48	2.55	2.61	2.65	2.69	2.20
72. PERSONAL SERVICES EXC. AUTO.	7.54	7.98	8.46	8.94	9.42	9.88	5.55
73. BUSINESS SERVICES	0.18	0.19	0.20	0.20	0.21	0.22	3.39
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	1.32	1.37	1.42	1.46	1.49	1.51	2.69
TOTAL, ALL INDUSTRIES	113.66	117.44	122.04	125.67	127.99	129.78	2.69

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
153. FURNACE OPER.&TENDERS, EX. METAL
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	0.18	0.20	0.21	0.23	0.24	0.24	6.55
14. FOOD & KINDRED PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	5.31
16. FABRIC,YARN & THREAD MILLS	0.01	0.01	0.01	0.01	0.01	0.01	5.01
20. LUMBER & WOOD PRODUCTS	0.06	0.07	0.07	0.08	0.09	0.09	8.14
21. WOOD CONTAINERS	0.01	0.01	0.01	0.01	0.01	0.01	9.81
24. PAPER & ALLIED PRODUCTS	0.05	0.05	0.06	0.06	0.06	0.06	6.33
25. PAPERBOARD CONTAINERS & BOXES	0.01	0.01	0.01	0.01	0.01	0.01	8.77
27. CHEMICALS & PRODUCTS	0.10	0.10	0.11	0.12	0.13	0.13	6.93
28. PLASTICS & SYNTHETIC MATLS.	0.01	0.01	0.01	0.02	0.02	0.02	8.72
31. PET REFINING & REL. PROD.	0.05	0.05	0.06	0.06	0.07	0.07	5.29
32. RUBBER & MISC. PLASTICS PROD.	0.01	0.02	0.02	0.02	0.02	0.02	10.06
35. GLASS & GLASS PRODUCTS	0.04	0.05	0.05	0.06	0.06	0.06	8.46
36. STONE & CLAY PRODUCTS	0.22	0.25	0.26	0.28	0.30	0.31	7.61
37. PRIMARY FERROUS METALS	0.04	0.05	0.05	0.05	0.06	0.06	6.98
38. NONFERROUS METALS	0.03	0.04	0.04	0.05	0.05	0.06	10.25
40. FAB. STRUCTURAL METAL PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	8.51
41. SCREW MACHINE PROD.&STAMPINGS	0.01	0.01	0.01	0.01	0.01	0.01	7.72
56. RADIO,TV, & COMMUNICATION EQ.	0.04	0.05	0.05	0.06	0.06	0.06	7.87
57. ELECTRONIC COMPONENTS & ACCESS.	0.01	0.01	0.01	0.01	0.02	0.02	11.24
59. MOTOR VEHICLES & EQUIPMENT	0.01	0.01	0.01	0.01	0.01	0.01	17.13
60. AIRCRAFT & PARTS	0.09	0.10	0.11	0.13	0.13	0.14	8.54
61. OTHER TRANSPORTATION EQ.	0.01	0.01	0.01	0.01	0.02	0.02	3.65
65. TRANSPORTATION & WAREHOUSING	0.12	0.13	0.13	0.14	0.14	0.14	2.76
68. UTILITIES	0.02	0.02	0.03	0.03	0.03	0.03	6.46
71. REAL ESTATE & RENTAL	0.01	0.01	0.01	0.01	0.01	0.01	5.62
72. PERSONAL SERVICES EXC. AUTO.	0.01	0.01	0.01	0.01	0.01	0.01	7.73
73. BUSINESS SERVICES	0.03	0.03	0.04	0.04	0.04	0.04	9.02
77. MISC. SERVICES	0.09	0.10	0.10	0.10	0.10	0.11	2.22
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.01	0.01	0.01	0.01	0.01	0.01	2.91
82. GOVERNMENT INDUSTRY	0.02	0.02	0.02	0.02	0.02	0.02	0.10
TOTAL, ALL INDUSTRIES	1.38	1.52	1.62	1.75	1.85	1.91	6.69
TOTAL EMPLOYMENT							
13. ORDNANCE & ACCESSORIES	0.29	0.30	0.30	0.30	0.30	0.30	0.52
14. FOOD & KINDRED PRODUCTS	1.45	1.47	1.49	1.48	1.47	1.46	0.19
16. FABRIC,YARN & THREAD MILLS	0.66	0.68	0.69	0.71	0.71	0.71	1.62

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
153. FURNACE OPER.&TENDERS, EX. METAL
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
20. LUMBER & WOOD PRODUCTS	2.95	3.17	3.26	3.36	3.37	3.31	2.37
21. WOOD CONTAINERS	0.09	0.09	0.09	0.10	0.10	0.10	1.15
24. PAPER & ALLIED PRODUCTS	2.57	2.64	2.65	2.66	2.65	2.63	0.51
25. PAPERBOARD CONTAINERS & BOXES	0.32	0.33	0.34	0.35	0.35	0.35	1.71
27. CHEMICALS & PRODUCTS	1.99	2.01	2.03	2.03	2.03	2.03	0.46
28. PLASTICS & SYNTHETIC MATLS.	0.47	0.49	0.51	0.52	0.53	0.53	2.32
31. PET REFINING & REL. PROD.	0.97	0.96	0.97	0.98	0.98	0.98	0.35
32. RUBBER & MISC. PLASTICS PROD.	0.49	0.51	0.53	0.55	0.56	0.56	2.65
35. GLASS & GLASS PRODUCTS	1.88	1.89	1.91	1.91	1.89	1.86	-0.18
36. STONE & CLAY PRODUCTS	6.73	6.82	6.89	7.02	7.01	6.88	0.42
37. PRIMARY FERROUS METALS	0.59	0.60	0.62	0.62	0.62	0.61	0.66
38. NONFERROUS METALS	0.40	0.42	0.44	0.46	0.47	0.48	3.60
40. FAB. STRUCTURAL METAL PRODUCTS	0.14	0.14	0.14	0.15	0.15	0.16	2.73
41. SCREW MACHINE PROD.&STAMPINGS	0.15	0.16	0.17	0.17	0.17	0.17	2.19
56. RADIO,TV, & COMMUNICATION EQ.	0.10	0.10	0.11	0.11	0.11	0.11	1.73
57. ELECTRONIC COMPONENTS & ACCESS.	0.04	0.04	0.05	0.05	0.05	0.05	3.53
59. MOTOR VEHICLES & EQUIPMENT	0.33	0.35	0.36	0.37	0.37	0.37	2.22
60. AIRCRAFT & PARTS	0.18	0.19	0.20	0.20	0.20	0.20	1.95
61. OTHER TRANSPORTATION EQ.	0.05	0.05	0.05	0.05	0.05	0.05	2.24
65. TRANSPORTATION & WAREHOUSING	2.91	2.93	2.94	2.96	2.93	2.89	-0.12
68. UTILITIES	1.04	1.04	1.05	1.05	1.06	1.06	0.49
71. REAL ESTATE & RENTAL	0.22	0,22	0.22	0.22	0.22	0.21	-0.59
72. PERSONAL SERVICES EXC. AUTO.	0.28	0.28	0.28	0.29	0.29	0.29	1.23
73. BUSINESS SERVICES	0.59	0.61	0.63	0.66	0.68	0.70	3.61
77. MISC. SERVICES	14.68	14.60	14.56	14.63	14.75	14.90	0.30
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.25	0.26	0.26	0.26	0.26	0.26	0.49
82. GOVERNMENT INDUSTRY	7.97	7.78	7.68	7.62	7.56	7.55	-1.08
TOTAL, ALL INDUSTRIES	54.80	55.25	55.63	56.10	56.21	56.15	0.49

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
154. WINDING OPERATORS, NEC
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
24. PAPER & ALLIED PRODUCTS	0.20	0.22	0.24	0.26	0.27	0.28	6.48
25. PAPERBOARD CONTAINERS & BOXES	0.04	0.05	0.05	0.06	0.06	0.06	8.78
31. PET REFINING & REL. PROD.	0.01	0.01	0.01	0.01	0.01	0.01	4.43
32. RUBBER & MISC. PLASTICS PROD.	0.01	0.01	0.02	0.02	0.02	0.02	10.45
36. STONE & CLAY PRODUCTS	0.01	0.01	0.02	0.02	0.02	0.02	8.18
42. OTHER FAB. METAL PRODUCTS	0.16	0.18	0.20	0.23	0.24	0.26	10.15
46. MATERIALS HANDLING MACH. & EQ.	0.01	0.01	0.01	0.01	0.01	0.01	9.12
47. METALWORKING MACH. & EQ.	0.01	0.01	0.01	0.01	0.01	0.01	9.29
49. GENERAL INDUSTRY MACHINERY	0.04	0.05	0.05	0.06	0.06	0.06	7.51
50. MISC. NONELECTRICAL MACH.	0.01	0.01	0.01	0.01	0.01	0.02	7.53
51. OFFICE,COMPUTING & ACCT. MACH.	0.01	0.01	0.01	0.01	0.01	0.01	7.34
53. ELECTRICAL MACHINERY	0.41	0.47	0.51	0.56	0.60	0.62	8.64
55. ELECTRIC LIGHTING & WIRING EQ.	0.03	0.03	0.03	0.03	0.04	0.04	8.25
56. RADIO,TV, & COMMUNICATION EQ.	1.73	1.99	2.18	2.37	2.49	2.55	9.09
57. ELECTRONIC COMPONENTS & ACCESS.	1.97	2.34	2.63	2.95	3.21	3.37	11.37
58. MISC. ELECTRICAL MACH. & EQ.	0.03	0.03	0.03	0.04	0.04	0.04	9.57
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.04	0.04	0.05	0.05	0.05	0.05	6.19
TOTAL, ALL INDUSTRIES	4.74	5.50	6.09	6.71	7.20	7.47	9.54
TOTAL EMPLOYMENT							
24. PAPER & ALLIED PRODUCTS	10.88	11.19	11.29	11.31	11.28	11.24	0.65
25. PAPERBOARD CONTAINERS & BOXES	1.92	1.97	2.02	2.06	2.08	2.09	1.72
31. PET REFINING & REL. PROD.	0.19	0.19	0.19	0.19	0.19	0.18	-0.47
32. RUBBER & MISC. PLASTICS PROD.	0.45	0.47	0.49	0.51	0.52	0.53	3.02
36. STONE & CLAY PRODUCTS	0.38	0.39	0.40	0.41	0.41	0.40	0.95
42. OTHER FAB. METAL PRODUCTS	3.48	3.61	3.78	3.91	4.02	4.12	3.42
46. MATERIALS HANDLING MACH. & EQ.	0.12	0.12	0.13	0.13	0.14	0.14	3.62
47. METALWORKING MACH. & EQ.	0.14	0.15	0.15	0.16	0.17	0.17	3.70
49. GENERAL INDUSTRY MACHINERY	0.98	1.01	1.06	1.08	1.10	1.12	2.62
50. MISC. NONELECTRICAL MACH.	0.09	0.09	0.10	0.10	0.10	0.10	2.22
51. OFFICE,COMPUTING & ACCT. MACH.	0.25	0.26	0.28	0.28	0.29	0.29	2.75
53. ELECTRICAL MACHINERY	8.28	8.38	8.72	8.88	8.94	8.97	1.62
55. ELECTRIC LIGHTING & WIRING EQ.	0.55	0.55	0.56	0.58	0.59	0.59	1.70
56. RADIO,TV, & COMMUNICATION EQ.	4.09	4.18	4.32	4.39	4.43	4.50	1.94
57. ELECTRONIC COMPONENTS & ACCESS.	8.97	9.36	9.82	10.22	10.51	10.73	3.65
58. MISC. ELECTRICAL MACH. & EQ.	0.98	1.02	1.06	1.07	1.08	1.09	2.12

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
154. WINDING OPERATORS, NEC
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.38	0.39	0.40	0.41	0.41	0.42	2.09
TOTAL, ALL INDUSTRIES	43.61	44.83	46.32	47.30	47.89	48.36	2.09

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
155. WIRERS, ELECTRONIC
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
53. ELECTRICAL MACHINERY	0.18	0.20	0.22	0.24	0.25	0.26	8.45
55. ELECTRIC LIGHTING & WIRING EQ.	0.03	0.03	0.04	0.04	0.04	0.04	8.24
56. RADIO,TV, & COMMUNICATION EQ.	5.38	6.19	6.81	7.39	7.79	7.98	8.22
57. ELECTRONIC COMPONENTS & ACCESS.	0.95	1.13	1.27	1.42	1.55	1.62	11.37
58. MISC. ELECTRICAL MACH. & EQ.	0.04	0.05	0.05	0.05	0.06	0.06	9.57
62. INSTRUMENTS & SUPPLIES	0.34	0.39	0.42	0.46	0.49	0.51	8.13
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.04	0.05	0.05	0.06	0.06	0.07	8.63
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.02	0.02	0.02	0.02	0.02	0.02	4.81
TOTAL, ALL INDUSTRIES	6.98	8.05	8.88	9.69	10.28	10.57	8.67
TOTAL EMPLOYMENT							
53. ELECTRICAL MACHINERY	3.54	3.58	3.71	3.78	3.79	3.80	1.44
55. ELECTRIC LIGHTING & WIRING EQ.	0.63	0.64	0.65	0.67	0.68	0.69	1.69
56. RADIO,TV, & COMMUNICATION EQ.	12.73	13.04	13.46	13.71	13.85	14.09	2.06
57. ELECTRONIC COMPONENTS & ACCESS.	4.32	4.51	4.73	4.92	5.07	5.17	3.65
58. MISC. ELECTRICAL MACH. & EQ.	1.45	1.50	1.56	1.58	1.60	1.61	2.12
62. INSTRUMENTS & SUPPLIES	2.96	3.01	3.13	3.25	3.33	3.38	2.67
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	1.03	1.04	1.09	1.14	1.18	1.21	3.26
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.08	0.09	0.09	0.09	0.09	0.10	2.35
TOTAL, ALL INDUSTRIES	26.88	27.54	28.57	29.28	29.73	30.20	2.35

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
156. OPERATIVES, NEC
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
1. LIVESTOCK & PRODUCTS	0.06	0.06	0.06	0.06	0.06	0.06	2.60
2. OTHER AGRICULTURAL PRODUCTS	0.10	0.10	0.10	0.10	0.11	0.11	2.47
3. FORESTRY & FISHERY PRODUCTS	0.06	0.07	0.07	0.08	0.08	0.09	5.96
4. AGR.,FORESTRY,&FISHERY SERV.	0.18	0.20	0.21	0.22	0.24	0.25	6.14
5. IRON ORE MINING	0.41	0.48	0.52	0.56	0.58	0.60	7.76
6. NONFERROUS METAL MINING	0.82	0.96	1.07	1.19	1.30	1.38	11.03
7. COAL MINING	2.11	2.39	2.61	2.84	3.09	3.23	8.91
8. CRUDE PETROLEUM & N. GAS	8.74	9.28	9.57	10.07	10.54	10.60	3.93
9. STONE&CLAY MINING & QUARRYING	0.92	1.04	1.13	1.28	1.39	1.48	9.87
10. CHEM&FERTILIZER MIN. MINING	0.13	0.14	0.15	0.17	0.18	0.19	7.91
11. NEW CONSTRUCTION	5.59	6.33	6.81	7.53	8.11	8.52	8.80
13. ORDNANCE & ACCESSORIES	10.95	12.39	13.52	14.62	15.44	16.03	7.93
14. FOOD & KINDRED PRODUCTS	5.32	5.76	6.05	6.39	6.63	6.77	4.96
15. TOBACCO MANUFACTURES	0.03	0.04	0.04	0.04	0.04	0.04	7.16
16. FABRIC,YARN & THREAD MILLS	3.20	3.42	3.58	3.78	3.96	4.06	4.90
17. MISC. TEXTILE GOODS	0.74	0.80	0.86	0.94	1.00	1.04	7.17
18. APPAREL	3.17	3.36	3.53	3.78	4.03	4.25	6.03
19. MISC. FABRICATED TEXTILE PROD.	2.88	3.05	3.18	3.38	3.50	3.63	4.72
20. LUMBER & WOOD PRODUCTS	3.35	3.79	4.09	4.46	4.85	5.14	8.95
21. WOOD CONTAINERS	0.95	1.09	1.20	1.32	1.44	1.52	9.82
22. HOUSEHOLD FURNITURE	0.60	0.64	0.69	0.71	0.73	0.72	3.70
23. OTHER FURNITURE & FIXTURES	0.60	0.62	0.65	0.68	0.72	0.75	4.70
24. PAPER & ALLIED PRODUCTS	3.09	3.40	3.68	3.94	4.15	4.29	6.78
25. PAPERBOARD CONTAINERS & BOXES	1.79	2.00	2.19	2.41	2.59	2.71	8.61
26. PRINTING & PUBLISHING	3.43	3.69	3.91	4.18	4.35	4.44	5.27
27. CHEMICALS & PRODUCTS	5.97	6.55	7.00	7.56	8.09	8.44	7.19
28. PLASTICS & SYNTHETIC MATLS.	1.73	1.93	2.12	2.33	2.50	2.60	8.45
29. DRUGS,CLEANING & TOILET PREP.	0.25	0.26	0.27	0.28	0.29	0.30	3.53
30. PAINTS & ALLIED PRODUCTS	0.90	0.99	1.07	1.17	1.26	1.32	7.97
31. PET REFINING & REL. PROD.	2.11	2.23	2.35	2.50	2.62	2.69	4.95
32. RUBBER & MISC. PLASTICS PROD.	8.68	9.80	10.91	12.24	13.40	14.15	10.28
33. LEATHER TANNING & FINISHING	0.05	0.05	0.05	0.05	0.06	0.06	5.38
34. FOOTWEAR & OTHER LEATHER PROD.	0.29	0.32	0.33	0.36	0.37	0.38	5.43
35. GLASS & GLASS PRODUCTS	1.74	1.96	2.15	2.38	2.57	2.73	9.41
36. STONE & CLAY PRODUCTS	5.07	5.79	6.23	6.89	7.40	7.78	8.95
37. PRIMARY FERROUS METALS	7.55	8.41	9.10	9.93	10.59	11.06	7.94
38. NONFERROUS METALS	8.29	9.52	10.48	11.57	12.48	13.08	9.55

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
156. OPERATIVES, NEC
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
39. METAL CONTAINERS	0.29	0.31	0.33	0.35	0.38	0.40	6.61
40. FAB. STRUCTURAL METAL PRODUCTS	3.07	3.46	3.70	3.98	4.22	4.46	7.74
41. SCREW MACHINE PROD.&STAMPINGS	2.38	2.66	2.87	3.13	3.33	3.47	7.80
42. OTHER FAB. METAL PRODUCTS	2.80	3.19	3.49	3.85	4.15	4.37	9.33
43. ENGINES & TURBINES	0.68	0.76	0.83	0.88	0.92	0.96	7.19
44. FARM & GARDEN MACHINERY	0.04	0.05	0.05	0.05	0.06	0.06	7.29
45. CONSTR. & MINING MACHINERY	0.19	0.21	0.23	0.25	0.26	0.27	7.24
46. MATERIALS HANDLING MACH. & EQ.	0.33	0.38	0.41	0.45	0.49	0.51	9.12
47. METALWORKING MACH. & EQ.	0.75	0.85	0.93	1.02	1.09	1.13	8.63
48. SPECIAL INDUSTRY MACHINERY	0.12	0.13	0.15	0.17	0.19	0.20	11.23
49. GENERAL INDUSTRY MACHINERY	0.73	0.81	0.87	0.93	0.99	1.02	7.05
50. MISC. NONELECTRICAL MACH.	1.07	1.16	1.26	1.38	1.45	1.49	6.81
51. OFFICE,COMPUTING & ACCT. MACH.	0.41	0.47	0.50	0.54	0.56	0.57	6.65
52. SERVICE INDUSTRY MACHINES	0.24	0.28	0.30	0.35	0.40	0.44	13.37
53. ELECTRICAL MACHINERY	1.39	1.59	1.73	1.90	2.05	2.14	9.01
54. HOUSEHOLD APPLIANCES	0.05	0.05	0.06	0.06	0.07	0.07	9.50
55. ELECTRIC LIGHTING & WIRING EQ.	1.20	1.34	1.44	1.57	1.68	1.75	7.93
56. RADIO,TV, & COMMUNICATION EQ.	12.60	14.38	15.69	16.89	17.65	17.93	7.30
57. ELECTRONIC COMPONENTS & ACCESS.	9.11	10.74	11.99	13.30	14.39	14.96	10.44
58. MISC. ELECTRICAL MACH. & EQ.	0.61	0.70	0.76	0.84	0.91	0.96	9.57
59. MOTOR VEHICLES & EQUIPMENT	2.46	2.93	3.33	3.96	4.64	5.42	17.14
60. AIRCRAFT & PARTS	14.59	16.41	17.97	19.71	20.96	21.40	7.96
61. OTHER TRANSPORTATION EQ.	7.99	8.43	8.70	8.88	9.17	9.45	3.42
62. INSTRUMENTS & SUPPLIES	4.88	5.50	6.01	6.59	7.02	7.28	8.33
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	1.03	1.13	1.22	1.35	1.45	1.53	8.28
64. MISC. MANUFACTURING	1.06	1.16	1.23	1.33	1.40	1.44	6.36
65. TRANSPORTATION & WAREHOUSING	43.93	47.17	50.02	53.86	56.81	58.68	5.96
66. COMMUNICATION EXC. RADIO & TV	0.13	0.13	0.14	0.15	0.16	0.17	5.65
67. RADIO & TV BROADCASTING	0.01	0.01	0.01	0.01	0.01	0.01	8.15
68. UTILITIES	0.86	0.95	1.03	1.12	1.18	1.21	7.06
69. WHOLESALE & RETAIL TRADE	12.57	14.13	15.49	17.08	18.39	19.27	8.92
70. FINANCE & INSURANCE	0.05	0.06	0.06	0.07	0.08	0.08	9.38
71. REAL ESTATE & RENTAL	0.07	0.08	0.08	0.09	0.10	0.10	8.93
72. PERSONAL SERVICES EXC. AUTO.	6.80	7.49	7.98	8.56	8.98	9.25	6.34
73. BUSINESS SERVICES	7.58	8.48	9.28	10.20	10.90	11.30	8.30
74. EATING & DRINKING PLACES	0.41	0.47	0.53	0.58	0.63	0.66	9.76
75. AUTOMOBILE REPAIR & SERVICE	1.70	1.89	2.05	2.23	2.38	2.47	7.75
76. AMUSEMENTS	0.12	0.14	0.15	0.16	0.18	0.19	8.54
77. MISC. SERVICES	2.20	2.26	2.36	2.50	2.63	2.69	4.16

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
156. OPERATIVES, NEC
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	15.05	16.13	17.12	18.24	19.00	19.41	5.22
82. GOVERNMENT INDUSTRY	33.60	33.05	33.80	34.85	35.54	35.90	1.33
TOTAL, ALL INDUSTRIES	296.95	324.42	347.70	375.43	397.57	411.54	6.74
TOTAL EMPLOYMENT							
1. LIVESTOCK & PRODUCTS	9.08	9.16	9.01	8.85	8.79	8.72	-0.80
2. OTHER AGRICULTURAL PRODUCTS	65.39	65.45	65.57	65.15	64.81	64.53	-0.27
3. FORESTRY & FISHERY PRODUCTS	2.53	2.67	2.85	2.97	2.97	2.94	3.00
4. AGR.,FORESTRY,&FISHERY SERV.	9.89	10.09	10.13	10.28	10.34	10.44	1.08
5. IRON ORE MINING	8.11	8.69	9.29	9.18	8.99	8.78	1.60
6. NONFERROUS METAL MINING	14.06	14.85	15.45	15.85	15.76	15.87	2.44
7. COAL MINING	75.34	79.06	81.89	83.81	86.48	88.27	3.22
8. CRUDE PETROLEUM & N. GAS	118.47	118.03	117.46	114.93	113.00	113.59	-0.84
9. STONE&CLAY MINING & QUARRYING	29.37	29.96	30.95	32.23	32.92	33.19	2.48
10. CHEM&FERTILIZER MIN. MINING	6.36	6.52	6.74	6.90	6.96	7.02	2.01
11. NEW CONSTRUCTION	148.71	152.05	155.35	160.51	164.61	167.12	2.36
13. ORDNANCE & ACCESSORIES	18.11	18.54	18.88	19.33	19.60	19.82	1.82
14. FOOD & KINDRED PRODUCTS	795.96	805.91	809.83	806.02	797.22	789.84	-0.15
15. TOBACCO MANUFACTURES	26.21	26.22	25.89	25.48	25.20	24.74	-1.15
16. FABRIC,YARN & THREAD MILLS	256.53	263.58	270.07	274.83	276.73	276.55	1.51
17. MISC. TEXTILE GOODS	50.68	52.64	54.84	56.68	57.66	58.11	2.77
18. APPAREL	880.27	887.32	907.16	923.99	924.82	924.94	0.99
19. MISC. FABRICATED TEXTILE PROD.	97.76	100.26	103.00	105.01	106.30	107.37	1.89
20. LUMBER & WOOD PRODUCTS	161.88	175.25	181.94	188.73	190.63	188.88	3.13
21. WOOD CONTAINERS	15.93	15.90	16.20	16.61	16.78	16.87	1.16
22. HOUSEHOLD FURNITURE	103.44	109.09	112.66	116.44	118.98	120.09	3.03
23. OTHER FURNITURE & FIXTURES	37.63	37.94	39.16	40.36	41.24	42.12	2.28
24. PAPER & ALLIED PRODUCTS	166.05	171.19	173.22	174.02	174.06	174.02	0.94
25. PAPERBOARD CONTAINERS & BOXES	81.48	83.54	85.33	86.82	87.64	88.03	1.56
26. PRINTING & PUBLISHING	218.64	217.62	217.44	217.25	216.33	215.32	-0.31
27. CHEMICALS & PRODUCTS	123.95	125.74	127.14	127.88	128.14	128.34	0.70
28. PLASTICS & SYNTHETIC MATLS.	71.68	74.15	76.70	78.44	79.31	79.42	2.07
29. DRUGS,CLEANING & TOILET PREP.	70.53	70.57	71.21	71.65	71.25	71.04	0.14
30. PAINTS & ALLIED PRODUCTS	17.05	17.82	18.41	19.00	19.34	19.53	2.75
31. PET REFINING & REL. PROD.	39.22	39.07	39.20	39.45	39.41	39.27	0.02
32. RUBBER & MISC. PLASTICS PROD.	318.77	329.51	343.31	354.39	363.38	366.99	2.86
33. LEATHER TANNING & FINISHING	8.69	8.99	9.28	9.30	9.29	9.27	1.29
34. FOOTWEAR & OTHER LEATHER PROD.	112.29	112.77	113.45	113.29	112.56	111.88	-0.07

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
156. OPERATIVES, NEC
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
35. GLASS & GLASS PRODUCTS	78.95	80.41	81.92	82.57	82.40	81.76	0.70
36. STONE & CLAY PRODUCTS	156.94	161.10	164.80	169.85	171.63	170.49	1.67
37. PRIMARY FERROUS METALS	105.89	109.25	112.79	114.30	114.84	114.44	1.57
38. NONFERROUS METALS	97.94	101.78	106.13	109.46	111.45	113.23	2.95
39. METAL CONTAINERS	19.51	19.24	19.28	19.62	19.75	19.86	0.36
40. FAB. STRUCTURAL METAL PRODUCTS	68.78	69.02	70.79	73.23	74.86	75.93	2.00
41. SCREW MACHINE PROD.&STAMPINGS	38.79	40.81	42.17	42.93	43.19	43.40	2.27
42. OTHER FAB. METAL PRODUCTS	60.87	62.51	65.01	66.81	68.07	69.39	2.66
43. ENGINES & TURBINES	8.12	8.34	8.61	8.66	8.66	8.66	1.28
44. FARM & GARDEN MACHINERY	12.53	12.75	13.30	13.38	13.44	13.49	1.50
45. CONSTR. & MINING MACHINERY	16.20	17.13	18.02	18.66	19.16	19.37	3.64
46. MATERIALS HANDLING MACH. & EQ.	5.79	5.98	6.34	6.60	6.78	6.92	3.62
47. METALWORKING MACH. & EQ.	14.48	14.96	15.74	16.27	16.63	16.84	3.07
48. SPECIAL INDUSTRY MACHINERY	16.00	16.22	16.90	17.52	17.82	18.06	2.45
49. GENERAL INDUSTRY MACHINERY	16.60	16.93	17.65	18.04	18.27	18.49	2.18
50. MISC. NONELECTRICAL MACH.	9.36	9.53	9.87	10.02	10.05	10.10	1.54
51. OFFICE,COMPUTING & ACCT. MACH.	10.92	11.27	11.67	11.81	11.90	12.11	2.09
52. SERVICE INDUSTRY MACHINES	13.08	13.60	14.25	14.48	14.51	14.52	2.10
53. ELECTRICAL MACHINERY	27.90	28.36	29.61	30.26	30.56	30.75	1.97
54. HOUSEHOLD APPLIANCES	19.09	19.61	20.15	20.83	21.28	21.58	2.48
55. ELECTRIC LIGHTING & WIRING EQ.	25.04	25.12	25.71	26.25	26.57	26.84	1.40
56. RADIO,TV, & COMMUNICATION EQ.	29.84	30.30	31.02	31.32	31.38	31.67	1.20
57. ELECTRONIC COMPONENTS & ACCESS.	41.57	42.96	44.72	46.14	47.08	47.69	2.79
58. MISC. ELECTRICAL MACH. & EQ.	22.38	23.16	24.08	24.36	24.66	24.86	2.12
59. MOTOR VEHICLES & EQUIPMENT	127.04	132.81	137.32	139.52	141.05	141.85	2.23
60. AIRCRAFT & PARTS	29.22	30.21	30.86	31.64	31.53	31.33	1.40
61. OTHER TRANSPORTATION EQ.	27.57	28.41	29.43	30.08	30.17	30.45	2.00
62. INSTRUMENTS & SUPPLIES	41.91	42.68	44.41	46.18	47.45	48.27	2.87
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	23.71	23.98	24.95	25.98	26.78	27.39	2.93
64. MISC. MANUFACTURING	95.89	97.70	101.18	104.39	106.36	107.47	2.31
65. TRANSPORTATION & WAREHOUSING	1,033.34	1,073.33	1,112.16	1,156.47	1,180.79	1,197.80	3.00
66. COMMUNICATION EXC. RADIO & TV	5.12	5.18	5.33	5.41	5.56	5.63	1.93
67. RADIO & TV BROADCASTING	0.35	0.36	0.37	0.38	0.38	0.38	1.71
68. UTILITIES	40.06	40.53	40.96	41.38	41.83	42.21	1.05
69. WHOLESALE & RETAIL TRADE	2,054.25	2,105.96	2,157.44	2,198.80	2,228.28	2,259.50	1.92
70. FINANCE & INSURANCE	5.90	6.00	6.13	6.29	6.45	6.61	2.30
71. REAL ESTATE & RENTAL	2.46	2.52	2.60	2.67	2.73	2.78	2.52
72. PERSONAL SERVICES EXC. AUTO.	370.91	369.42	369.62	369.90	370.21	369.66	-0.07
73. BUSINESS SERVICES	156.26	160.66	165.66	171.62	176.59	180.46	2.92

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
156. OPERATIVES, NEC
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
74. EATING & DRINKING PLACES	26.76	27.24	27.69	27.93	28.12	28.21	1.06
75. AUTOMOBILE REPAIR & SERVICE	117.40	120.30	121.97	123.12	124.37	125.92	1.41
76. AMUSEMENTS	12.74	12.93	13.30	13.63	13.98	14.31	2.35
77. MISC. SERVICES	340.40	345.24	351.04	359.34	368.91	379.57	2.20
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	446.35	456.16	466.45	475.27	480.12	483.69	1.62
82. GOVERNMENT INDUSTRY	263.28	261.73	263.07	266.02	269.03	272.73	0.71
TOTAL, ALL INDUSTRIES	10,303.94	10,530.20	10,767.77	10,971.41	11,083.44	11,165.87	1.62

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
157. SERVICE WORKERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
1. LIVESTOCK & PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.02	2.61
2. OTHER AGRICULTURAL PRODUCTS	0.02	0.02	0.02	0.03	0.03	0.03	2.78
3. FORESTRY & FISHERY PRODUCTS	0.01	0.01	0.01	0.02	0.02	0.02	5.99
4. AGR.,FORESTRY,&FISHERY SERV.	0.04	0.04	0.04	0.05	0.05	0.05	6.86
5. IRON ORE MINING	0.03	0.03	0.03	0.03	0.04	0.04	8.14
6. NONFERROUS METAL MINING	0.07	0.08	0.09	0.10	0.11	0.11	11.06
7. COAL MINING	0.06	0.07	0.08	0.08	0.09	0.10	9.18
8. CRUDE PETROLEUM & N. GAS	0.25	0.27	0.28	0.29	0.30	0.31	3.89
9. STONE&CLAY MINING & QUARRYING	0.04	0.04	0.05	0.05	0.06	0.06	10.05
11. NEW CONSTRUCTION	1.34	1.52	1.64	1.81	1.96	2.06	8.93
13. ORDNANCE & ACCESSORIES	4.55	5.13	5.58	6.01	6.32	6.55	7.53
14. FOOD & KINDRED PRODUCTS	0.44	0.48	0.50	0.53	0.55	0.56	5.13
16. FABRIC,YARN & THREAD MILLS	0.11	0.11	0.12	0.13	0.13	0.13	4.84
17. MISC. TEXTILE GOODS	0.03	0.04	0.04	0.04	0.04	0.05	7.17
18. APPAREL	0.06	0.06	0.07	0.07	0.08	0.08	6.04
19. MISC. FABRICATED TEXTILE PROD.	0.08	0.08	0.08	0.09	0.09	0.10	4.69
20. LUMBER & WOOD PRODUCTS	0.20	0.23	0.25	0.27	0.30	0.31	9.02
21. WOOD CONTAINERS	0.03	0.03	0.04	0.04	0.04	0.04	9.79
22. HOUSEHOLD FURNITURE	0.03	0.03	0.03	0.03	0.04	0.04	3.70
23. OTHER FURNITURE & FIXTURES	0.04	0.04	0.05	0.05	0.05	0.05	4.67
24. PAPER & ALLIED PRODUCTS	0.16	0.18	0.19	0.21	0.22	0.23	6.80
25. PAPERBOARD CONTAINERS & BOXES	0.05	0.06	0.06	0.07	0.07	0.08	7.93
26. PRINTING & PUBLISHING	0.33	0.36	0.38	0.41	0.43	0.44	5.97
27. CHEMICALS & PRODUCTS	0.48	0.53	0.57	0.62	0.66	0.69	7.57
28. PLASTICS & SYNTHETIC MATLS.	0.08	0.09	0.10	0.11	0.12	0.13	8.70
29. DRUGS,CLEANING & TOILET PREP.	0.04	0.04	0.04	0.04	0.04	0.04	3.69
30. PAINTS & ALLIED PRODUCTS	0.05	0.06	0.06	0.07	0.07	0.08	8.19
31. PET REFINING & REL. PROD.	0.14	0.15	0.16	0.17	0.18	0.18	5.32
32. RUBBER & MISC. PLASTICS PROD.	0.28	0.31	0.35	0.39	0.43	0.45	10.19
34. FOOTWEAR & OTHER LEATHER PROD.	0.01	0.01	0.01	0.01	0.01	0.01	4.98
35. GLASS & GLASS PRODUCTS	0.07	0.08	0.09	0.11	0.11	0.12	10.49
36. STONE & CLAY PRODUCTS	0.18	0.21	0.22	0.25	0.26	0.28	8.54
37. PRIMARY FERROUS METALS	0.86	0.95	1.03	1.12	1.19	1.24	7.74
38. NONFERROUS METALS	0.58	0.67	0.74	0.81	0.87	0.92	9.40
39. METAL CONTAINERS	0.02	0.02	0.02	0.02	0.02	0.02	6.60
40. FAB. STRUCTURAL METAL PRODUCTS	0.39	0.44	0.47	0.51	0.54	0.57	7.77
41. SCREW MACHINE PROD.&STAMPINGS	0.38	0.43	0.46	0.50	0.53	0.56	7.70

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
157. SERVICE WORKERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
42. OTHER FAB. METAL PRODUCTS	0.25	0.29	0.32	0.35	0.38	0.40	9.53
43. ENGINES & TURBINES	0.16	0.18	0.20	0.21	0.22	0.23	7.71
44. FARM & GARDEN MACHINERY	0.01	0.01	0.01	0.01	0.01	0.01	7.31
45. CONSTR. & MINING MACHINERY	0.04	0.05	0.05	0.06	0.06	0.06	7.24
46. MATERIALS HANDLING MACH. & EQ.	0.07	0.08	0.09	0.10	0.11	0.11	9.12
47. METALWORKING MACH. & EQ.	0.34	0.39	0.43	0.48	0.51	0.53	9.36
48. SPECIAL INDUSTRY MACHINERY	0.02	0.02	0.03	0.03	0.03	0.04	12.06
49. GENERAL INDUSTRY MACHINERY	0.21	0.23	0.25	0.27	0.29	0.30	7.52
50. MISC. NONELECTRICAL MACH.	0.52	0.56	0.62	0.68	0.72	0.74	7.53
51. OFFICE,COMPUTING & ACCT. MACH.	0.16	0.19	0.20	0.22	0.23	0.23	7.32
52. SERVICE INDUSTRY MACHINES	0.05	0.05	0.06	0.07	0.08	0.09	13.36
53. ELECTRICAL MACHINERY	0.20	0.23	0.26	0.28	0.30	0.32	9.08
54. HOUSEHOLD APPLIANCES	0.01	0.01	0.01	0.01	0.01	0.01	9.50
55. ELECTRIC LIGHTING & WIRING EQ.	0.14	0.16	0.17	0.18	0.20	0.21	8.25
56. RADIO,TV, & COMMUNICATION EQ.	3.77	4.33	4.76	5.16	5.43	5.55	8.06
57. ELECTRONIC COMPONENTS & ACCESS.	1.45	1.72	1.94	2.17	2.36	2.48	11.37
58. MISC. ELECTRICAL MACH. & EQ.	0.08	0.09	0.10	0.11	0.12	0.13	9.57
59. MOTOR VEHICLES & EQUIPMENT	0.47	0.56	0.64	0.76	0.89	1.04	17.14
60. AIRCRAFT & PARTS	5.19	5.87	6.47	7.14	7.64	7.84	8.59
61. OTHER TRANSPORTATION EQ.	1.14	1.20	1.24	1.26	1.30	1.34	3.33
62. INSTRUMENTS & SUPPLIES	0.80	0.90	0.99	1.08	1.15	1.19	8.31
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.16	0.17	0.19	0.21	0.22	0.24	8.53
64. MISC. MANUFACTURING	0.06	0.07	0.07	0.07	0.08	0.08	5.87
65. TRANSPORTATION & WAREHOUSING	5.16	5.48	5.75	6.12	6.39	6.54	4.85
66. COMMUNICATION EXC. RADIO & TV	0.35	0.38	0.40	0.43	0.45	0.46	5.45
67. RADIO & TV BROADCASTING	0.06	0.07	0.08	0.09	0.09	0.10	8.18
68. UTILITIES	0.37	0.40	0.43	0.46	0.48	0.49	5.66
69. WHOLESALE & RETAIL TRADE	4.13	4.66	5.13	5.68	6.14	6.45	9.35
70. FINANCE & INSURANCE	0.68	0.78	0.86	0.96	1.04	1.10	9.91
71. REAL ESTATE & RENTAL	3.38	3.71	3.99	4.31	4.55	4.67	6.65
72. PERSONAL SERVICES EXC. AUTO.	28.60	32.21	35.05	38.39	41.08	43.19	8.59
73. BUSINESS SERVICES	34.13	38.43	42.27	46.74	50.22	52.33	8.92
74. EATING & DRINKING PLACES	76.43	87.43	97.16	107.67	116.12	121.08	9.64
75. AUTOMOBILE REPAIR & SERVICE	0.11	0.12	0.13	0.15	0.16	0.16	7.67
76. AMUSEMENTS	3.47	3.84	4.18	4.60	4.95	5.25	8.60
77. MISC. SERVICES	29.41	30.46	31.96	34.14	36.02	37.16	4.79
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	25.18	26.83	28.57	30.54	31.93	32.76	5.40
82. GOVERNMENT INDUSTRY	38.05	37.54	38.50	39.81	40.71	41.23	1.62
TOTAL, ALL INDUSTRIES	276.40	302.66	327.51	356.15	378.78	392.87	7.29

2/1/83

TOTAL EMPLOYMENT

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
157. SERVICE WORKERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
1. LIVESTOCK & PRODUCTS	2.16	2.18	2.15	2.11	2.10	2.08	-0.80
2. OTHER AGRICULTURAL PRODUCTS	15.66	15.72	15.80	15.74	15.71	15.69	0.04
3. FORESTRY & FISHERY PRODUCTS	0.50	0.53	0.57	0.59	0.59	0.58	3.03
4. AGR.,FORESTRY,&FISHERY SERV.	2.06	2.12	2.14	2.18	2.21	2.25	1.76
5. IRON ORE MINING	0.50	0.54	0.57	0.57	0.56	0.55	1.96
6. NONFERROUS METAL MINING	1.14	1.21	1.26	1.29	1.28	1.29	2.48
7. COAL MINING	2.21	2.33	2.42	2.48	2.56	2.62	3.48
8. CRUDE PETROLEUM & N. GAS	3.43	3.41	3.39	3.32	3.26	3.28	-0.88
9. STONE&CLAY MINING & QUARRYING	1.21	1.23	1.28	1.33	1.36	1.37	2.64
11. NEW CONSTRUCTION	35.68	36.53	37.37	38.65	39.68	40.33	2.48
13. ORDNANCE & ACCESSORIES	7.53	7.68	7.79	7.95	8.03	8.09	1.44
14. FOOD & KINDRED PRODUCTS	65.78	66.71	67.15	66.94	66.32	65.82	0.01
16. FABRIC,YARN & THREAD MILLS	8.49	8.72	8.93	9.08	9.14	9.13	1.46
17. MISC. TEXTILE GOODS	2.27	2.36	2.45	2.54	2.58	2.60	2.77
18. APPAREL	16.76	16.90	17.28	17.60	17.62	17.62	1.00
19. MISC. FABRICATED TEXTILE PROD.	2.61	2.67	2.75	2.80	2.83	2.86	1.86
20. LUMBER & WOOD PRODUCTS	9.84	10.66	11.07	11.49	11.62	11.52	3.20
21. WOOD CONTAINERS	0.46	0.46	0.47	0.48	0.49	0.49	1.13
22. HOUSEHOLD FURNITURE	5.03	5.30	5.48	5.66	5.78	5.84	3.03
23. OTHER FURNITURE & FIXTURES	2.68	2.71	2.79	2.88	2.94	3.00	2.25
24. PAPER & ALLIED PRODUCTS	8.71	8.98	9.09	9.13	9.13	9.13	0.96
25. PAPERBOARD CONTAINERS & BOXES	2.38	2.43	2.46	2.49	2.50	2.49	0.92
26. PRINTING & PUBLISHING	21.13	21.18	21.31	21.43	21.48	21.52	0.36
27. CHEMICALS & PRODUCTS	10.01	10.19	10.34	10.44	10.50	10.55	1.06
28. PLASTICS & SYNTHETIC MATLS.	3.42	3.55	3.68	3.77	3.82	3.84	2.31
29. DRUGS,CLEANING & TOILET PREP.	10.02	10.04	10.15	10.23	10.19	10.17	0.30
30. PAINTS & ALLIED PRODUCTS	1.00	1.05	1.08	1.12	1.14	1.16	2.96
31. PET REFINING & REL. PROD.	2.64	2.63	2.65	2.68	2.69	2.69	0.38
32. RUBBER & MISC. PLASTICS PROD.	10.24	10.58	11.01	11.36	11.64	11.74	2.77
34. FOOTWEAR & OTHER LEATHER PROD.	2.64	2.64	2.64	2.63	2.60	2.57	-0.50
35. GLASS & GLASS PRODUCTS	3.38	3.48	3.59	3.66	3.68	3.68	1.69
36. STONE & CLAY PRODUCTS	5.68	5.81	5.92	6.08	6.12	6.06	1.29
37. PRIMARY FERROUS METALS	12.03	12.39	12.76	12.91	12.95	12.88	1.38
38. NONFERROUS METALS	6.90	7.16	7.46	7.68	7.81	7.92	2.80
39. METAL CONTAINERS	1.21	1.19	1.19	1.21	1.22	1.23	0.35
40. FAB. STRUCTURAL METAL PRODUCTS	8.76	8.79	9.02	9.34	9.55	9.69	2.03

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
157. SERVICE WORKERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
41. SCREW MACHINE PROD.&STAMPINGS	6.25	6.57	6.78	6.90	6.93	6.96	2.17
42. OTHER FAB. METAL PRODUCTS	5.50	5.65	5.89	6.07	6.19	6.32	2.84
43. ENGINES & TURBINES	1.91	1.97	2.04	2.06	2.07	2.08	1.78
44. FARM & GARDEN MACHINERY	2.11	2.15	2.24	2.26	2.26	2.27	1.51
45. CONSTR. & MINING MACHINERY	3.60	3.80	4.00	4.14	4.25	4.30	3.64
46. MATERIALS HANDLING MACH. & EQ.	1.29	1.33	1.41	1.46	1.50	1.54	3.62
47. METALWORKING MACH. & EQ.	6.62	6.89	7.30	7.59	7.81	7.96	3.76
48. SPECIAL INDUSTRY MACHINERY	2.76	2.81	2.95	3.09	3.16	3.23	3.22
49. GENERAL INDUSTRY MACHINERY	4.74	4.86	5.09	5.23	5.32	5.40	2.62
50. MISC. NONELECTRICAL MACH.	4.51	4.63	4.82	4.93	4.98	5.04	2.23
51. OFFICE,COMPUTING & ACCT. MACH.	4.34	4.51	4.70	4.79	4.85	4.96	2.73
52. SERVICE INDUSTRY MACHINES	2.55	2.65	2.78	2.83	2.83	2.83	2.10
53. ELECTRICAL MACHINERY	4.11	4.18	4.37	4.46	4.51	4.54	2.03
54. HOUSEHOLD APPLIANCES	2.18	2.24	2.30	2.37	2.43	2.46	2.48
55. ELECTRIC LIGHTING & WIRING EQ.	2.90	2.92	3.00	3.07	3.12	3.16	1.70
56. RADIO,TV, & COMMUNICATION EQ.	8.93	9.13	9.41	9.57	9.66	9.81	1.92
57. ELECTRONIC COMPONENTS & ACCESS.	6.60	6.89	7.23	7.52	7.74	7.90	3.65
58. MISC. ELECTRICAL MACH. & EQ.	2.93	3.04	3.16	3.19	3.23	3.26	2.12
59. MOTOR VEHICLES & EQUIPMENT	24.44	25.55	26.42	26.84	27.14	27.29	2.23
60. AIRCRAFT & PARTS	10.40	10.82	11.11	11.46	11.49	11.48	2.00
61. OTHER TRANSPORTATION EQ.	3.92	4.04	4.18	4.27	4.28	4.31	1.92
62. INSTRUMENTS & SUPPLIES	6.88	7.00	7.28	7.57	7.78	7.91	2.84
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	3.61	3.66	3.81	3.98	4.11	4.22	3.17
64. MISC. MANUFACTURING	5.47	5.55	5.72	5.87	5.96	5.99	1.84
65. TRANSPORTATION & WAREHOUSING	121.38	124.68	127.80	131.50	132.89	133.46	1.92
66. COMMUNICATION EXC. RADIO & TV	14.28	14.42	14.81	15.00	15.38	15.56	1.73
67. RADIO & TV BROADCASTING	3.23	3.33	3.42	3.47	3.50	3.52	1.75
68. UTILITIES	17.18	17.15	17.10	17.05	17.02	16.95	-0.27
69. WHOLESALE & RETAIL TRADE	674.63	694.49	714.33	730.86	743.47	756.65	2.32
70. FINANCE & INSURANCE	79.94	81.73	83.84	86.41	89.13	91.73	2.79
71. REAL ESTATE & RENTAL	123.04	123.45	124.40	125.22	125.48	125.38	0.38
72. PERSONAL SERVICES EXC. AUTO.	1,559.90	1,587.71	1,622.76	1,658.30	1,694.05	1,725.96	2.04
73. BUSINESS SERVICES	703.38	727.81	755.00	786.69	813.86	836.00	3.52
74. EATING & DRINKING PLACES	4,945.95	5,029.19	5,106.47	5,144.45	5,174.19	5,186.43	0.95
75. AUTOMOBILE REPAIR & SERVICE	7.67	7.85	7.95	8.02	8.10	8.19	1.34
76. AMUSEMENTS	355.74	361.30	371.99	381.37	391.41	400.67	2.41
77. MISC. SERVICES	4,556.39	4,651.68	4,759.55	4,901.31	5,060.71	5,235.55	2.82
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	897.75	912.90	930.10	947.27	964.19	980.64	1.78
82. GOVERNMENT INDUSTRY	1,249.43	1,243.83	1,251.49	1,265.71	1,280.35	1,300.88	0.81

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
157. SERVICE WORKERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
TOTAL, ALL INDUSTRIES	16,726.02	17,008.24	17,328.68	17,648.56	17,963.92	18,270.42	1.78

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
158. FOOD SERVICE WORKERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
2. OTHER AGRICULTURAL PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	2.80
3. FORESTRY & FISHERY PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	6.14
8. CRUDE PETROLEUM & N. GAS	0.06	0.06	0.06	0.06	0.07	0.07	4.18
11. NEW CONSTRUCTION	0.06	0.06	0.07	0.08	0.08	0.09	8.93
13. ORDNANCE & ACCESSORIES	0.12	0.13	0.14	0.16	0.16	0.17	7.45
14. FOOD & KINDRED PRODUCTS	0.02	0.02	0.03	0.03	0.03	0.03	4.14
20. LUMBER & WOOD PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	6.39
26. PRINTING & PUBLISHING	0.01	0.01	0.01	0.01	0.01	0.01	5.95
27. CHEMICALS & PRODUCTS	0.01	0.01	0.02	0.02	0.02	0.02	7.25
37. PRIMARY FERROUS METALS	0.04	0.04	0.04	0.05	0.05	0.05	7.61
38. NONFERROUS METALS	0.01	0.01	0.02	0.02	0.02	0.02	9.61
40. FAB. STRUCTURAL METAL PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	8.26
47. METALWORKING MACH. & EQ.	0.01	0.01	0.01	0.01	0.01	0.01	9.35
51. OFFICE,COMPUTING & ACCT. MACH.	0.01	0.01	0.01	0.01	0.01	0.01	7.33
56. RADIO,TV, & COMMUNICATION EQ.	0.21	0.25	0.27	0.29	0.31	0.32	8.05
57. ELECTRONIC COMPONENTS & ACCESS.	0.09	0.11	0.12	0.14	0.15	0.16	11.38
60. AIRCRAFT & PARTS	0.28	0.32	0.35	0.39	0.42	0.43	8.59
61. OTHER TRANSPORTATION EQ.	0.01	0.01	0.01	0.01	0.01	0.01	3.09
62. INSTRUMENTS & SUPPLIES	0.04	0.05	0.05	0.05	0.06	0.06	8.09
65. TRANSPORTATION & WAREHOUSING	0.55	0.57	0.59	0.62	0.64	0.64	3.24
66. COMMUNICATION EXC. RADIO & TV	0.01	0.01	0.01	0.02	0.02	0.02	5.49
68. UTILITIES	0.01	0.01	0.01	0.01	0.01	0.01	5.92
69. WHOLESALE & RETAIL TRADE	2.21	2.49	2.73	3.01	3.24	3.39	8.91
70. FINANCE & INSURANCE	0.08	0.09	0.10	0.11	0.12	0.12	9.67
71. REAL ESTATE & RENTAL	0.26	0.28	0.31	0.33	0.35	0.36	6.60
72. PERSONAL SERVICES EXC. AUTO.	9.88	11.11	12.09	13.23	14.15	14.87	8.53
73. BUSINESS SERVICES	0.66	0.76	0.84	0.94	1.02	1.07	9.95
74. EATING & DRINKING PLACES	73.28	83.82	93.13	103.19	111.27	116.01	9.62
76. AMUSEMENTS	1.54	1.71	1.86	2.05	2.21	2.34	8.68
77. MISC. SERVICES	7.31	7.50	7.81	8.28	8.67	8.87	3.95
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	3.89	4.34	4.73	5.16	5.47	5.64	7.69
82. GOVERNMENT INDUSTRY	7.23	7.11	7.26	7.49	7.63	7.71	1.29
TOTAL, ALL INDUSTRIES	108.01	121.04	132.81	145.88	156.33	162.66	8.53
TOTAL EMPLOYMENT							
2. OTHER AGRICULTURAL PRODUCTS	5.29	5.31	5.33	5.32	5.31	5.30	0.06

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
158. FOOD SERVICE WORKERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
3. FORESTRY & FISHERY PRODUCTS	0.23	0.24	0.26	0.27	0.27	0.27	3.17
8. CRUDE PETROLEUM & N. GAS	0.75	0.75	0.75	0.73	0.72	0.73	-0.61
11. NEW CONSTRUCTION	1.52	1.56	1.60	1.65	1.70	1.72	2.49
13. ORDNANCE & ACCESSORIES	0.20	0.20	0.20	0.21	0.21	0.21	1.37
14. FOOD & KINDRED PRODUCTS	3.35	3.36	3.35	3.31	3.25	3.19	-0.93
20. LUMBER & WOOD PRODUCTS	0.33	0.35	0.35	0.36	0.35	0.34	0.71
26. PRINTING & PUBLISHING	0.59	0.59	0.59	0.60	0.60	0.60	0.34
27. CHEMICALS & PRODUCTS	0.27	0.28	0.28	0.28	0.28	0.28	0.76
37. PRIMARY FERROUS METALS	0.52	0.53	0.55	0.56	0.56	0.55	1.25
38. NONFERROUS METALS	0.15	0.16	0.16	0.17	0.17	0.17	3.00
40. FAB. STRUCTURAL METAL PRODUCTS	0.16	0.16	0.17	0.17	0.18	0.18	2.50
47. METALWORKING MACH. & EQ.	0.12	0.12	0.13	0.14	0.14	0.14	3.75
51. OFFICE,COMPUTING & ACCT. MACH.	0.19	0.20	0.21	0.21	0.22	0.22	2.73
56. RADIO,TV, & COMMUNICATION EQ.	0.51	0.52	0.54	0.54	0.55	0.56	1.91
57. ELECTRONIC COMPONENTS & ACCESS.	0.42	0.44	0.46	0.48	0.49	0.51	3.66
60. AIRCRAFT & PARTS	0.57	0.59	0.60	0.62	0.62	0.62	1.99
61. OTHER TRANSPORTATION EQ.	0.04	0.05	0.05	0.05	0.05	0.05	1.68
62. INSTRUMENTS & SUPPLIES	0.35	0.35	0.37	0.38	0.39	0.40	2.63
65. TRANSPORTATION & WAREHOUSING	12.91	13.06	13.18	13.36	13.29	13.14	0.35
66. COMMUNICATION EXC. RADIO & TV	0.54	0.54	0.56	0.56	0.58	0.58	1.78
68. UTILITIES	0.40	0.40	0.40	0.40	0.40	0.40	-0.03
69. WHOLESALE & RETAIL TRADE	361.91	370.99	380.03	387.29	392.46	397.93	1.92
70. FINANCE & INSURANCE	9.12	9.30	9.52	9.79	10.08	10.36	2.57
71. REAL ESTATE & RENTAL	9.44	9.46	9.53	9.59	9.60	9.59	0.33
72. PERSONAL SERVICES EXC. AUTO.	538.66	547.92	559.67	571.59	583.58	594.26	1.98
73. BUSINESS SERVICES	13.70	14.33	15.02	15.79	16.48	17.07	4.49
74. EATING & DRINKING PLACES	4,742.25	4,821.30	4,894.65	4,930.35	4,958.19	4,969.29	0.94
76. AMUSEMENTS	157.94	160.54	165.42	169.72	174.31	178.56	2.49
77. MISC. SERVICES	1,132.58	1,146.20	1,163.03	1,188.14	1,217.43	1,250.30	2.00
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	180.51	183.43	186.44	188.65	190.71	192.40	1.28
82. GOVERNMENT INDUSTRY	74.87	74.49	74.94	75.88	76.83	77.91	0.80
TOTAL, ALL INDUSTRIES	7,255.00	7,372.44	7,493.14	7,582.02	7,664.90	7,732.74	1.28

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
159. SELECTED HEALTH SERVICE WORKERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
4. AGR.,FORESTRY,&FISHERY SERV.	0.01	0.01	0.01	0.01	0.01	0.01	6.88
13. ORDNANCE & ACCESSORIES	0.02	0.02	0.02	0.02	0.03	0.03	8.74
27. CHEMICALS & PRODUCTS	0.02	0.02	0.02	0.03	0.03	0.03	7.51
60. AIRCRAFT & PARTS	0.09	0.11	0.12	0.13	0.14	0.14	8.58
61. OTHER TRANSPORTATION EQ.	0.02	0.02	0.02	0.02	0.02	0.02	3.45
65. TRANSPORTATION & WAREHOUSING	0.01	0.01	0.01	0.01	0.01	0.01	5.34
72. PERSONAL SERVICES EXC. AUTO.	0.01	0.01	0.01	0.01	0.02	0.02	8.15
73. BUSINESS SERVICES	0.17	0.20	0.23	0.25	0.28	0.30	11.27
76. AMUSEMENTS	0.01	0.01	0.01	0.02	0.02	0.02	9.20
77. MISC. SERVICES	9.93	10.45	11.13	12.05	12.88	13.45	6.24
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.17	0.18	0.19	0.20	0.21	0.21	4.24
82. GOVERNMENT INDUSTRY	4.86	4.77	4.87	5.01	5.10	5.14	1.14
TOTAL, ALL INDUSTRIES	15.38	15.86	16.70	17.83	18.80	19.44	4.81
TOTAL EMPLOYMENT							
4. AGR.,FORESTRY,&FISHERY SERV.	0.52	0.53	0.54	0.55	0.56	0.57	1.78
13. ORDNANCE & ACCESSORIES	0.03	0.03	0.03	0.03	0.03	0.03	2.59
27. CHEMICALS & PRODUCTS	0.42	0.43	0.44	0.44	0.44	0.44	1.00
60. AIRCRAFT & PARTS	0.19	0.19	0.20	0.21	0.21	0.21	1.99
61. OTHER TRANSPORTATION EQ.	0.06	0.06	0.06	0.06	0.06	0.06	2.04
65. TRANSPORTATION & WAREHOUSING	0.19	0.20	0.20	0.21	0.21	0.21	2.39
72. PERSONAL SERVICES EXC. AUTO.	0.58	0.59	0.60	0.61	0.62	0.63	1.63
73. BUSINESS SERVICES	3.57	3.79	4.02	4.28	4.52	4.72	5.74
76. AMUSEMENTS	1.21	1.24	1.28	1.32	1.37	1.41	2.97
77. MISC. SERVICES	1,539.01	1,596.11	1,657.26	1,730.20	1,809.59	1,894.86	4.25
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	8.71	9.00	9.32	9.71	10.13	10.58	3.96
82. GOVERNMENT INDUSTRY	131.90	131.08	131.73	133.25	134.79	136.51	0.69
TOTAL, ALL INDUSTRIES	1,696.71	1,753.61	1,816.10	1,891.32	1,972.98	2,060.69	3.96

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
160. PROTECTIVE SERVICE WORKERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
6. NONFERROUS METAL MINING	0.03	0.04	0.04	0.04	0.05	0.05	11.02
7. COAL MINING	0.04	0.04	0.05	0.05	0.06	0.06	9.22
8. CRUDE PETROLEUM & N. GAS	0.02	0.02	0.02	0.02	0.02	0.02	4.45
9. STONE&CLAY MINING & QUARRYING	0.01	0.02	0.02	0.02	0.02	0.02	10.27
11. NEW CONSTRUCTION	0.10	0.11	0.12	0.13	0.14	0.15	8.58
13. ORDNANCE & ACCESSORIES	1.98	2.22	2.40	2.58	2.70	2.79	7.13
14. FOOD & KINDRED PRODUCTS	0.02	0.02	0.02	0.02	0.02	0.03	5.35
16. FABRIC,YARN & THREAD MILLS	0.02	0.02	0.03	0.03	0.03	0.03	4.63
17. MISC. TEXTILE GOODS	0.01	0.01	0.01	0.01	0.01	0.01	7.17
18. APPAREL	0.01	0.01	0.01	0.01	0.01	0.01	5.99
19. MISC. FABRICATED TEXTILE PROD.	0.01	0.01	0.01	0.01	0.01	0.01	4.65
20. LUMBER & WOOD PRODUCTS	0.05	0.06	0.07	0.07	0.08	0.08	9.05
21. WOOD CONTAINERS	0.01	0.01	0.01	0.01	0.02	0.02	9.80
22. HOUSEHOLD FURNITURE	0.01	0.01	0.01	0.01	0.01	0.01	3.70
23. OTHER FURNITURE & FIXTURES	0.01	0.01	0.01	0.01	0.01	0.01	4.39
24. PAPER & ALLIED PRODUCTS	0.03	0.04	0.04	0.04	0.04	0.05	6.62
25. PAPERBOARD CONTAINERS & BOXES	0.01	0.01	0.01	0.01	0.01	0.01	8.80
26. PRINTING & PUBLISHING	0.02	0.03	0.03	0.03	0.03	0.03	6.25
27. CHEMICALS & PRODUCTS	0.15	0.17	0.18	0.19	0.21	0.22	7.83
28. PLASTICS & SYNTHETIC MATLS.	0.02	0.02	0.02	0.02	0.02	0.02	8.70
29. DRUGS,CLEANING & TOILET PREP.	0.01	0.01	0.01	0.01	0.01	0.01	4.24
30. PAINTS & ALLIED PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	8.16
31. PET REFINING & REL. PROD.	0.06	0.06	0.07	0.07	0.07	0.08	5.25
32. RUBBER & MISC. PLASTICS PROD.	0.04	0.04	0.05	0.05	0.06	0.06	10.08
35. GLASS & GLASS PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.02	8.40
36. STONE & CLAY PRODUCTS	0.02	0.03	0.03	0.03	0.04	0.04	8.59
37. PRIMARY FERROUS METALS	0.26	0.29	0.31	0.34	0.36	0.37	7.51
38. NONFERROUS METALS	0.15	0.18	0.19	0.21	0.23	0.24	9.70
40. FAB. STRUCTURAL METAL PRODUCTS	0.07	0.07	0.08	0.08	0.09	0.09	7.81
41. SCREW MACHINE PROD.&STAMPINGS	0.06	0.06	0.07	0.07	0.08	0.08	7.68
42. OTHER FAB. METAL PRODUCTS	0.03	0.03	0.03	0.04	0.04	0.04	9.73
43. ENGINES & TURBINES	0.04	0.05	0.05	0.05	0.06	0.06	7.71
45. CONSTR. & MINING MACHINERY	0.01	0.01	0.01	0.01	0.01	0.01	7.24
46. MATERIALS HANDLING MACH. & EQ.	0.02	0.02	0.02	0.02	0.03	0.03	9.12
47. METALWORKING MACH. & EQ.	0.02	0.03	0.03	0.03	0.04	0.04	9.36
49. GENERAL INDUSTRY MACHINERY	0.03	0.03	0.03	0.04	0.04	0.04	7.52
50. MISC. NONELECTRICAL MACH.	0.02	0.02	0.02	0.02	0.03	0.03	7.55

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
160. PROTECTIVE SERVICE WORKERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
51. OFFICE,COMPUTING & ACCT. MACH.	0.04	0.04	0.04	0.05	0.05	0.05	7.32
53. ELECTRICAL MACHINERY	0.03	0.03	0.03	0.04	0.04	0.04	9.14
55. ELECTRIC LIGHTING & WIRING EQ.	0.03	0.03	0.03	0.03	0.04	0.04	8.26
56. RADIO,TV, & COMMUNICATION EQ.	1.16	1.33	1.47	1.59	1.68	1.72	8.15
57. ELECTRONIC COMPONENTS & ACCESS.	0.24	0.29	0.33	0.37	0.40	0.42	11.37
58. MISC. ELECTRICAL MACH. & EQ.	0.02	0.02	0.02	0.02	0.02	0.02	9.58
59. MOTOR VEHICLES & EQUIPMENT	0.09	0.11	0.12	0.15	0.17	0.20	17.14
60. AIRCRAFT & PARTS	1.67	1.89	2.05	2.29	2.45	2.52	8.59
61. OTHER TRANSPORTATION EQ.	0.38	0.40	0.42	0.42	0.44	0.45	3.35
62. INSTRUMENTS & SUPPLIES	0.09	0.10	0.11	0.12	0.12	0.13	8.18
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.02	0.02	0.03	0.03	0.03	0.03	8.52
64. MISC. MANUFACTURING	0.01	0.01	0.01	0.01	0.01	0.01	6.11
65. TRANSPORTATION & WAREHOUSING	0.39	0.42	0.43	0.46	0.48	0.48	4.15
66. COMMUNICATION EXC. RADIO & TV	0.01	0.01	0.01	0.01	0.01	0.01	6.86
68. UTILITIES	0.05	0.06	0.06	0.06	0.07	0.07	6.35
69. WHOLESALE & RETAIL TRADE	0.31	0.36	0.40	0.45	0.50	0.54	11.80
70. FINANCE & INSURANCE	0.15	0.17	0.19	0.22	0.24	0.26	11.44
71. REAL ESTATE & RENTAL	0.54	0.61	0.66	0.73	0.78	0.81	8.33
72. PERSONAL SERVICES EXC. AUTO.	0.39	0.43	0.47	0.51	0.55	0.57	8.22
73. BUSINESS SERVICES	13.54	15.11	16.47	18.06	19.26	19.91	8.02
74. EATING & DRINKING PLACES	0.30	0.35	0.39	0.43	0.47	0.49	9.76
76. AMUSEMENTS	0.26	0.29	0.32	0.35	0.38	0.41	9.17
77. MISC. SERVICES	0.57	0.59	0.61	0.65	0.68	0.69	4.06
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	0.11	0.11	0.12	0.12	0.13	0.13	2.49
82. GOVERNMENT INDUSTRY	19.97	19.78	20.36	21.13	21.68	22.02	1.98
TOTAL, ALL INDUSTRIES	43.79	46.38	49.33	52.79	55.41	56.95	5.39

TOTAL EMPLOYMENT

6. NONFERROUS METAL MINING	0.51	0.54	0.56	0.58	0.57	0.58	2.44
7. COAL MINING	1.36	1.43	1.49	1.53	1.58	1.62	3.51
8. CRUDE PETROLEUM & N. GAS	0.24	0.24	0.24	0.23	0.23	0.23	-0.35
9. STONE&CLAY MINING & QUARRYING	0.45	0.46	0.47	0.50	0.51	0.51	2.85
11. NEW CONSTRUCTION	2.65	2.71	2.76	2.84	2.91	2.95	2.15
13. ORDNANCE & ACCESSORIES	3.27	3.32	3.36	3.41	3.43	3.45	1.07
14. FOOD & KINDRED PRODUCTS	2.91	2.96	2.98	2.98	2.96	2.94	0.22
16. FABRIC,YARN & THREAD MILLS	1.80	1.85	1.89	1.91	1.92	1.92	1.25
17. MISC. TEXTILE GOODS	0.55	0.58	0.60	0.62	0.63	0.64	2.77
18. APPAREL	1.87	1.89	1.93	1.96	1.96	1.96	0.96

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
160. PROTECTIVE SERVICE WORKERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
19. MISC. FABRICATED TEXTILE PROD.	0.32	0.33	0.34	0.35	0.35	0.35	1.83
20. LUMBER & WOOD PRODUCTS	2.64	2.86	2.98	3.09	3.13	3.10	3.23
21. WOOD CONTAINERS	0.17	0.17	0.18	0.18	0.18	0.18	1.15
22. HOUSEHOLD FURNITURE	0.95	1.00	1.03	1.07	1.09	1.10	3.03
23. OTHER FURNITURE & FIXTURES	0.39	0.39	0.40	0.41	0.42	0.43	1.98
24. PAPER & ALLIED PRODUCTS	1.76	1.81	1.83	1.83	1.83	1.83	0.79
25. PAPERBOARD CONTAINERS & BOXES	0.36	0.37	0.38	0.39	0.39	0.39	1.73
26. PRINTING & PUBLISHING	1.48	1.48	1.50	1.51	1.52	1.52	0.62
27. CHEMICALS & PRODUCTS	3.12	3.18	3.24	3.28	3.30	3.32	1.30
28. PLASTICS & SYNTHETIC MATLS.	0.65	0.67	0.69	0.71	0.72	0.72	2.30
29. DRUGS,CLEANING & TOILET PREP.	1.65	1.67	1.69	1.72	1.72	1.73	0.84
30. PAINTS & ALLIED PRODUCTS	0.13	0.14	0.14	0.15	0.15	0.15	2.94
31. PET REFINING & REL. PROD.	1.09	1.09	1.10	1.11	1.11	1.11	0.31
32. RUBBER & MISC. PLASTICS PROD.	1.44	1.49	1.54	1.59	1.63	1.64	2.66
35. GLASS & GLASS PRODUCTS	0.46	0.47	0.47	0.47	0.46	0.46	-0.23
36. STONE & CLAY PRODUCTS	0.76	0.78	0.80	0.82	0.83	0.82	1.34
37. PRIMARY FERROUS METALS	3.65	3.75	3.85	3.89	3.89	3.86	1.16
38. NONFERROUS METALS	1.81	1.88	1.97	2.03	2.07	2.11	3.08
40. FAB. STRUCTURAL METAL PRODUCTS	1.46	1.46	1.50	1.56	1.59	1.62	2.07
41. SCREW MACHINE PROD.&STAMPINGS	0.90	0.94	0.97	0.99	0.99	1.00	2.15
42. OTHER FAB. METAL PRODUCTS	0.58	0.60	0.63	0.65	0.66	0.68	3.03
43. ENGINES & TURBINES	0.50	0.52	0.54	0.54	0.54	0.55	1.77
45. CONSTR. & MINING MACHINERY	0.84	0.88	0.93	0.96	0.99	1.00	3.64
46. MATERIALS HANDLING MACH. & EQ.	0.30	0.31	0.33	0.34	0.35	0.36	3.62
47. METALWORKING MACH. & EQ.	0.47	0.49	0.52	0.54	0.56	0.57	3.76
49. GENERAL INDUSTRY MACHINERY	0.65	0.67	0.70	0.72	0.73	0.74	2.63
50. MISC. NONELECTRICAL MACH.	0.16	0.17	0.18	0.18	0.18	0.18	2.24
51. OFFICE,COMPUTING & ACCT. MACH.	0.94	0.97	1.02	1.03	1.05	1.07	2.72
53. ELECTRICAL MACHINERY	0.52	0.53	0.55	0.56	0.57	0.57	2.09
55. ELECTRIC LIGHTING & WIRING EQ.	0.53	0.53	0.55	0.56	0.57	0.58	1.71
56. RADIO,TV, & COMMUNICATION EQ.	2.75	2.81	2.90	2.95	2.98	3.03	2.00
57. ELECTRONIC COMPONENTS & ACCESS.	1.12	1.17	1.22	1.27	1.31	1.34	3.65
58. MISC. ELECTRICAL MACH. & EQ.	0.56	0.58	0.60	0.61	0.62	0.62	2.13
59. MOTOR VEHICLES & EQUIPMENT	4.72	4.94	5.11	5.19	5.24	5.27	2.23
60. AIRCRAFT & PARTS	3.34	3.47	3.57	3.68	3.69	3.69	2.00
61. OTHER TRANSPORTATION EQ.	1.32	1.36	1.40	1.43	1.44	1.45	1.93
62. INSTRUMENTS & SUPPLIES	0.74	0.75	0.78	0.81	0.83	0.85	2.72
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.50	0.51	0.53	0.55	0.57	0.59	3.16
64. MISC. MANUFACTURING	0.73	0.74	0.77	0.79	0.80	0.81	2.07

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
160. PROTECTIVE SERVICE WORKERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
65. TRANSPORTATION & WAREHOUSING	9.28	9.46	9.64	9.85	9.89	9.86	1.24
66. COMMUNICATION EXC. RADIO & TV	0.30	0.31	0.32	0.33	0.34	0.35	3.10
68. UTILITIES	2.34	2.35	2.36	2.37	2.38	2.39	0.38
69. WHOLESALE & RETAIL TRADE	50.14	52.91	55.71	58.28	60.54	62.85	4.62
70. FINANCE & INSURANCE	17.45	18.13	18.87	19.72	20.60	21.46	4.22
71. REAL ESTATE & RENTAL	19.77	20.18	20.67	21.14	21.50	21.79	1.96
72. PERSONAL SERVICES EXC. AUTO.	21.08	21.38	21.77	22.17	22.58	22.93	1.69
73. BUSINESS SERVICES	279.06	286.10	294.21	304.01	312.03	318.11	2.65
74. EATING & DRINKING PLACES	19.73	20.09	20.42	20.60	20.74	20.81	1.06
76. AMUSEMENTS	26.77	27.34	28.30	29.17	30.08	30.94	2.94
77. MISC. SERVICES	88.18	89.35	90.76	92.83	95.22	97.89	2.11
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	1.21	1.22	1.24	1.27	1.29	1.31	1.68
82. GOVERNMENT INDUSTRY	786.81	784.68	790.76	800.70	810.90	825.47	0.96
TOTAL, ALL INDUSTRIES	1,389.59	1,402.89	1,426.31	1,455.10	1,481.47	1,509.96	1.68

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
161. SERVICE WORKERS, NEC
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
1. LIVESTOCK & PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	2.62
2. OTHER AGRICULTURAL PRODUCTS	0.01	0.01	0.01	0.01	0.01	0.01	2.77
4. AGR.,FORESTRY,&FISHERY SERV.	0.02	0.02	0.03	0.03	0.03	0.03	6.86
5. IRON ORE MINING	0.02	0.02	0.02	0.03	0.03	0.03	8.07
6. NONFERROUS METAL MINING	0.03	0.04	0.04	0.05	0.05	0.06	11.05
7. COAL MINING	0.02	0.03	0.03	0.03	0.03	0.04	9.12
8. CRUDE PETROLEUM & N. GAS	0.18	0.19	0.19	0.20	0.21	0.21	3.74
9. STONE&CLAY MINING & QUARRYING	0.02	0.03	0.03	0.03	0.04	0.04	9.92
11. NEW CONSTRUCTION	1.18	1.34	1.45	1.60	1.73	1.82	8.95
13. ORDNANCE & ACCESSORIES	2.44	2.76	3.01	3.25	3.43	3.56	7.84
14. FOOD & KINDRED PRODUCTS	0.40	0.43	0.45	0.48	0.50	0.51	5.17
16. FABRIC,YARN & THREAD MILLS	0.08	0.09	0.09	0.09	0.10	0.10	4.85
17. MISC. TEXTILE GOODS	0.02	0.03	0.03	0.03	0.03	0.03	7.16
18. APPAREL	0.05	0.06	0.06	0.06	0.07	0.07	6.05
19. MISC. FABRICATED TEXTILE PROD.	0.06	0.07	0.07	0.08	0.08	0.08	4.69
20. LUMBER & WOOD PRODUCTS	0.14	0.16	0.17	0.19	0.21	0.22	9.12
21. WOOD CONTAINERS	0.02	0.02	0.02	0.02	0.03	0.03	9.78
22. HOUSEHOLD FURNITURE	0.02	0.02	0.03	0.03	0.03	0.03	3.70
23. OTHER FURNITURE & FIXTURES	0.04	0.04	0.04	0.04	0.04	0.05	4.71
24. PAPER & ALLIED PRODUCTS	0.12	0.14	0.15	0.16	0.17	0.17	6.84
25. PAPERBOARD CONTAINERS & BOXES	0.04	0.05	0.05	0.06	0.06	0.06	7.74
26. PRINTING & PUBLISHING	0.30	0.32	0.35	0.37	0.39	0.40	5.95
27. CHEMICALS & PRODUCTS	0.30	0.33	0.35	0.38	0.41	0.43	7.46
28. PLASTICS & SYNTHETIC MATLS.	0.06	0.07	0.07	0.08	0.08	0.09	8.71
29. DRUGS,CLEANING & TOILET PREP.	0.03	0.03	0.03	0.03	0.03	0.03	3.46
30. PAINTS & ALLIED PRODUCTS	0.04	0.05	0.05	0.06	0.06	0.06	8.20
31. PET REFINING & REL. PROD.	0.08	0.08	0.09	0.10	0.10	0.10	5.36
32. RUBBER & MISC. PLASTICS PROD.	0.24	0.27	0.30	0.33	0.36	0.38	10.21
34. FOOTWEAR & OTHER LEATHER PROD.	0.01	0.01	0.01	0.01	0.01	0.01	5.30
35. GLASS & GLASS PRODUCTS	0.06	0.07	0.08	0.08	0.09	0.10	10.63
36. STONE & CLAY PRODUCTS	0.16	0.18	0.19	0.21	0.22	0.23	8.53
37. PRIMARY FERROUS METALS	0.55	0.62	0.67	0.73	0.78	0.81	7.86
38. NONFERROUS METALS	0.42	0.48	0.53	0.58	0.62	0.65	9.28
39. METAL CONTAINERS	0.02	0.02	0.02	0.02	0.02	0.02	6.60
40. FAB. STRUCTURAL METAL PRODUCTS	0.31	0.35	0.38	0.41	0.43	0.45	7.74
41. SCREW MACHINE PROD.&STAMPINGS	0.32	0.36	0.39	0.42	0.45	0.47	7.70
42. OTHER FAB. METAL PRODUCTS	0.22	0.25	0.28	0.31	0.33	0.35	9.50

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
161. SERVICE WORKERS, NEC
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
43. ENGINES & TURBINES	0.11	0.13	0.14	0.15	0.16	0.16	7.72
44. FARM & GARDEN MACHINERY	0.01	0.01	0.01	0.01	0.01	0.01	7.01
45. CONSTR. & MINING MACHINERY	0.03	0.04	0.04	0.04	0.04	0.05	7.25
46. MATERIALS HANDLING MACH. & EQ.	0.06	0.06	0.07	0.08	0.08	0.09	9.12
47. METALWORKING MACH. & EQ.	0.31	0.36	0.39	0.43	0.46	0.48	9.36
48. SPECIAL INDUSTRY MACHINERY	0.02	0.02	0.02	0.03	0.03	0.03	12.06
49. GENERAL INDUSTRY MACHINERY	0.18	0.20	0.21	0.23	0.24	0.25	7.51
50. MISC. NONELECTRICAL MACH.	0.50	0.54	0.59	0.65	0.69	0.72	7.53
51. OFFICE,COMPUTING & ACCT. MACH.	0.12	0.14	0.15	0.16	0.17	0.17	7.32
52. SERVICE INDUSTRY MACHINES	0.04	0.05	0.05	0.06	0.07	0.08	13.37
53. ELECTRICAL MACHINERY	0.17	0.20	0.22	0.24	0.26	0.27	9.06
55. ELECTRIC LIGHTING & WIRING EQ.	0.11	0.13	0.14	0.15	0.16	0.17	8.25
56. RADIO,TV, & COMMUNICATION EQ.	2.40	2.75	3.02	3.28	3.45	3.52	8.02
57. ELECTRONIC COMPONENTS & ACCESS.	1.11	1.32	1.49	1.66	1.81	1.90	11.36
58. MISC. ELECTRICAL MACH. & EQ.	0.06	0.07	0.08	0.09	0.10	0.10	9.57
59. MOTOR VEHICLES & EQUIPMENT	0.38	0.45	0.51	0.61	0.72	0.84	17.14
60. AIRCRAFT & PARTS	3.15	3.56	3.93	4.33	4.63	4.76	8.59
61. OTHER TRANSPORTATION EQ.	0.73	0.76	0.79	0.80	0.83	0.85	3.32
62. INSTRUMENTS & SUPPLIES	0.67	0.76	0.83	0.91	0.97	1.01	8.34
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.13	0.14	0.16	0.17	0.19	0.20	8.53
64. MISC. MANUFACTURING	0.05	0.05	0.06	0.06	0.07	0.07	5.86
65. TRANSPORTATION & WAREHOUSING	4.21	4.48	4.71	5.03	5.27	5.40	5.11
66. COMMUNICATION EXC. RADIO & TV	0.33	0.35	0.37	0.40	0.43	0.43	5.41
67. RADIO & TV BROADCASTING	0.06	0.07	0.07	0.08	0.08	0.09	8.19
68. UTILITIES	0.31	0.34	0.36	0.38	0.40	0.41	5.53
69. WHOLESALE & RETAIL TRADE	1.60	1.81	2.00	2.21	2.39	2.52	9.44
70. FINANCE & INSURANCE	0.46	0.52	0.57	0.63	0.68	0.72	9.43
71. REAL ESTATE & RENTAL	2.58	2.82	3.02	3.25	3.42	3.50	6.29
72. PERSONAL SERVICES EXC. AUTO.	18.33	20.65	22.48	24.63	26.36	27.73	8.63
73. BUSINESS SERVICES	19.75	22.37	24.73	27.49	29.67	31.05	9.47
74. EATING & DRINKING PLACES	2.84	3.26	3.64	4.05	4.38	4.58	10.03
75. AUTOMOBILE REPAIR & SERVICE	0.11	0.12	0.13	0.14	0.15	0.15	7.58
76. AMUSEMENTS	1.66	1.83	1.99	2.18	2.35	2.49	8.43
77. MISC. SERVICES	11.60	11.92	12.41	13.17	13.80	14.14	4.04
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	15.66	16.81	17.92	19.19	20.07	20.61	5.64
82. GOVERNMENT INDUSTRY	5.99	5.88	6.01	6.19	6.30	6.35	1.19
TOTAL, ALL INDUSTRIES	103.89	113.99	123.07	133.78	142.18	147.65	7.28

TOTAL EMPLOYMENT

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
161. SERVICE WORKERS, NEC
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
1. LIVESTOCK & PRODUCTS	1.15	1.16	1.14	1.12	1.11	1.10	-0.79
2. OTHER AGRICULTURAL PRODUCTS	8.32	8.35	8.39	8.36	8.34	8.33	0.03
4. AGR.,FORESTRY,&FISHERY SERV.	1.24	1.28	1.29	1.32	1.34	1.36	1.76
5. IRON ORE MINING	0.38	0.40	0.43	0.43	0.42	0.41	1.90
6. NONFERROUS METAL MINING	0.58	0.61	0.63	0.65	0.65	0.65	2.47
7. COAL MINING	0.82	0.86	0.89	0.92	0.95	0.97	3.42
8. CRUDE PETROLEUM & N. GAS	2.42	2.41	2.39	2.34	2.29	2.30	-1.02
9. STONE&CLAY MINING & QUARRYING	0.74	0.75	0.78	0.81	0.83	0.84	2.52
11. NEW CONSTRUCTION	31.46	32.22	32.97	34.11	35.03	35.61	2.51
13. ORDNANCE & ACCESSORIES	4.04	4.13	4.20	4.30	4.36	4.40	1.74
14. FOOD & KINDRED PRODUCTS	59.48	60.35	60.77	60.61	60.07	59.64	0.05
16. FABRIC,YARN & THREAD MILLS	6.40	6.57	6.73	6.85	6.89	6.88	1.47
17. MISC. TEXTILE GOODS	1.62	1.68	1.75	1.81	1.84	1.85	2.76
18. APPAREL	14.61	14.73	15.06	15.34	15.36	15.36	1.01
19. MISC. FABRICATED TEXTILE PROD.	2.20	2.25	2.31	2.36	2.39	2.41	1.87
20. LUMBER & WOOD PRODUCTS	6.87	7.45	7.74	8.05	8.14	8.08	3.30
21. WOOD CONTAINERS	0.28	0.28	0.29	0.30	0.30	0.30	1.12
22. HOUSEHOLD FURNITURE	3.97	4.18	4.32	4.47	4.56	4.61	3.03
23. OTHER FURNITURE & FIXTURES	2.27	2.29	2.36	2.43	2.48	2.54	2.28
24. PAPER & ALLIED PRODUCTS	6.71	6.92	7.01	7.04	7.05	7.05	0.99
25. PAPERBOARD CONTAINERS & BOXES	1.97	2.01	2.03	2.05	2.05	2.05	0.74
26. PRINTING & PUBLISHING	19.05	19.09	19.20	19.31	19.35	19.38	0.34
27. CHEMICALS & PRODUCTS	6.20	6.30	6.39	6.44	6.47	6.50	0.96
28. PLASTICS & SYNTHETIC MATLS.	2.42	2.51	2.60	2.66	2.70	2.71	2.31
29. DRUGS,CLEANING & TOILET PREP.	7.17	7.16	7.22	7.26	7.22	7.19	0.08
30. PAINTS & ALLIED PRODUCTS	0.81	0.85	0.88	0.91	0.93	0.94	2.97
31. PET REFINING & REL. PROD.	1.48	1.48	1.49	1.50	1.51	1.51	0.42
32. RUBBER & MISC. PLASTICS PROD.	8.67	8.96	9.33	9.62	9.86	9.95	2.79
34. FOOTWEAR & OTHER LEATHER PROD.	1.98	1.98	1.99	1.99	1.97	1.96	-0.20
35. GLASS & GLASS PRODUCTS	2.71	2.80	2.88	2.94	2.96	2.97	1.82
36. STONE & CLAY PRODUCTS	4.82	4.93	5.02	5.15	5.19	5.14	1.28
37. PRIMARY FERROUS METALS	7.79	8.03	8.28	8.38	8.42	8.38	1.49
38. NONFERROUS METALS	4.94	5.12	5.32	5.48	5.56	5.64	2.69
39. METAL CONTAINERS	1.12	1.11	1.11	1.13	1.14	1.14	0.35
40. FAB. STRUCTURAL METAL PRODUCTS	7.02	7.05	7.23	7.48	7.64	7.75	2.00
41. SCREW MACHINE PROD.&STAMPINGS	5.24	5.51	5.69	5.79	5.82	5.84	2.17
42. OTHER FAB. METAL PRODUCTS	4.83	4.97	5.18	5.33	5.44	5.55	2.81
43. ENGINES & TURBINES	1.34	1.39	1.44	1.45	1.46	1.47	1.78

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
161. SERVICE WORKERS, NEC
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
44. FARM & GARDEN MACHINERY	1.56	1.58	1.64	1.65	1.65	1.66	1.23
45. CONSTR. & MINING MACHINERY	2.71	2.87	3.02	3.13	3.21	3.24	3.64
46. MATERIALS HANDLING MACH. & EQ.	0.97	1.00	1.06	1.11	1.14	1.16	3.62
47. METALWORKING MACH. & EQ.	6.02	6.26	6.63	6.90	7.10	7.23	3.76
48. SPECIAL INDUSTRY MACHINERY	2.47	2.52	2.65	2.76	2.83	2.89	3.22
49. GENERAL INDUSTRY MACHINERY	4.01	4.11	4.30	4.42	4.49	4.56	2.62
50. MISC. NONELECTRICAL MACH.	4.34	4.46	4.65	4.75	4.79	4.85	2.23
51. OFFICE,COMPUTING & ACCT. MACH.	3.21	3.34	3.48	3.54	3.59	3.67	2.73
52. SERVICE INDUSTRY MACHINES	2.32	2.41	2.53	2.57	2.57	2.57	2.10
53. ELECTRICAL MACHINERY	3.50	3.56	3.72	3.80	3.84	3.87	2.01
55. ELECTRIC LIGHTING & WIRING EQ.	2.36	2.38	2.44	2.50	2.54	2.57	1.70
56. RADIO,TV, & COMMUNICATION EQ.	5.67	5.80	5.98	6.08	6.13	6.23	1.88
57. ELECTRONIC COMPONENTS & ACCESS.	5.06	5.28	5.54	5.77	5.93	6.06	3.64
58. MISC. ELECTRICAL MACH. & EQ.	2.33	2.42	2.51	2.54	2.57	2.59	2.12
59. MOTOR VEHICLES & EQUIPMENT	19.62	20.51	21.20	21.54	21.78	21.90	2.23
60. AIRCRAFT & PARTS	6.31	6.56	6.74	6.95	6.97	6.96	2.00
61. OTHER TRANSPORTATION EQ.	2.50	2.58	2.67	2.72	2.73	2.75	1.91
62. INSTRUMENTS & SUPPLIES	5.79	5.89	6.13	6.38	6.55	6.67	2.87
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	3.03	3.07	3.21	3.35	3.46	3.54	3.17
64. MISC. MANUFACTURING	4.54	4.60	4.74	4.87	4.94	4.97	1.83
65. TRANSPORTATION & WAREHOUSING	99.00	101.96	104.78	108.09	109.50	110.24	2.17
66. COMMUNICATION EXC. RADIO & TV	13.44	13.57	13.93	14.10	14.46	14.62	1.70
67. RADIO & TV BROADCASTING	2.98	3.08	3.16	3.20	3.23	3.26	1.75
68. UTILITIES	14.40	14.35	14.30	14.23	14.19	14.12	-0.39
69. WHOLESALE & RETAIL TRADE	262.07	270.05	278.02	284.71	289.87	295.26	2.41
70. FINANCE & INSURANCE	53.36	54.29	55.44	56.90	58.44	59.91	2.34
71. REAL ESTATE & RENTAL	93.83	93.80	94.20	94.4[illegible]	94.38	94.00	0.04
72. PERSONAL SERVICES EXC. AUTO.	999.58	1,017.83	1,040.72	1,063.92	1,087.27	1,108.15	2.08
73. BUSINESS SERVICES	407.04	423.58	441.76	462.61	480.84	496.10	4.04
74. EATING & DRINKING PLACES	183.87	187.71	191.30	193.40	195.16	196.24	1.31
75. AUTOMOBILE REPAIR & SERVICE	7.26	7.43	7.52	7.58	7.64	7.73	1.25
76. AMUSEMENTS	169.82	172.18	176.98	181.16	185.65	189.76	2.24
77. MISC. SERVICES	1,796.61	1,820.02	1,848.50	1,890.15	1,938.47	1,992.50	2.09
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	699.30	709.44	721.72	735.52	749.03	762.31	1.74
82. GOVERNMENT INDUSTRY	255.21	252.63	252.77	254.24	255.81	258.62	0.27
TOTAL, ALL INDUSTRIES	6,376.06	6,468.55	6,580.47	6,706.35	6,829.51	6,950.61	1.74

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE
BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
162. LABORS, EXCEPT FARM
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
3. FORESTRY & FISHERY PRODUCTS	0.52	0.56	0.60	0.64	0.67	0.69	5.87
4. AGR.,FORESTRY,&FISHERY SERV.	1.65	1.79	1.90	2.06	2.20	2.30	6.87
5. IRON ORE MINING	0.28	0.32	0.35	0.38	0.40	0.41	7.93
6. NONFERROUS METAL MINING	0.51	0.59	0.66	0.74	0.80	0.86	11.11
7. COAL MINING	0.81	0.92	1.01	1.09	1.19	1.24	8.92
8. CRUDE PETROLEUM & N. GAS	0.69	0.73	0.75	0.78	0.81	0.81	3.32
9. STONE&CLAY MINING & QUARRYING	0.32	0.36	0.39	0.44	0.48	0.51	9.92
10. CHEM&FERTILIZER MIN. MINING	0.04	0.05	0.05	0.06	0.06	0.06	7.91
11. NEW CONSTRUCTION	28.40	32.16	34.64	38.32	41.29	43.39	8.85
13. ORDNANCE & ACCESSORIES	5.40	6.08	6.60	7.11	7.47	7.72	7.38
14. FOOD & KINDRED PRODUCTS	1.37	1.49	1.58	1.68	1.75	1.80	5.63
15. TOBACCO MANUFACTURES	0.02	0.02	0.02	0.02	0.03	0.03	7.10
16. FABRIC,YARN & THREAD MILLS	0.48	0.51	0.53	0.56	0.58	0.59	3.99
17. MISC. TEXTILE GOODS	0.14	0.16	0.17	0.18	0.19	0.20	7.10
18. APPAREL	0.17	0.18	0.18	0.20	0.21	0.22	5.95
19. MISC. FABRICATED TEXTILE PROD.	0.45	0.48	0.50	0.53	0.54	0.56	4.52
20. LUMBER & WOOD PRODUCTS	2.48	2.79	2.99	3.24	3.50	3.68	8.19
21. WOOD CONTAINERS	0.44	0.51	0.56	0.61	0.66	0.70	9.82
22. HOUSEHOLD FURNITURE	0.18	0.19	0.20	0.21	0.21	0.21	3.51
23. OTHER FURNITURE & FIXTURES	0.24	0.25	0.26	0.27	0.29	0.30	4.45
24. PAPER & ALLIED PRODUCTS	1.04	1.14	1.23	1.32	1.39	1.43	6.47
25. PAPERBOARD CONTAINERS & BOXES	0.53	0.60	0.65	0.72	0.77	0.81	8.61
26. PRINTING & PUBLISHING	0.68	0.73	0.77	0.82	0.86	0.87	5.14
27. CHEMICALS & PRODUCTS	1.18	1.28	1.36	1.46	1.54	1.60	6.27
28. PLASTICS & SYNTHETIC MATLS.	0.18	0.20	0.22	0.24	0.25	0.25	6.76
29. DRUGS,CLEANING & TOILET PREP.	0.07	0.07	0.07	0.07	0.08	0.08	2.52
30. PAINTS & ALLIED PRODUCTS	0.22	0.24	0.26	0.28	0.30	0.31	7.28
31. PET REFINING & REL. PROD.	0.67	0.70	0.74	0.78	0.82	0.83	4.50
32. RUBBER & MISC. PLASTICS PROD.	1.60	1.80	1.99	2.22	2.42	2.55	9.73
33. LEATHER TANNING & FINISHING	0.02	0.02	0.02	0.02	0.02	0.02	5.40
34. FOOTWEAR & OTHER LEATHER PROD.	0.04	0.04	0.04	0.05	0.05	0.05	4.95
35. GLASS & GLASS PRODUCTS	0.40	0.45	0.50	0.55	0.59	0.63	9.37
36. STONE & CLAY PRODUCTS	1.75	1.98	2.12	2.32	2.48	2.59	8.14
37. PRIMARY FERROUS METALS	6.90	7.67	8.29	9.04	9.63	10.04	7.80
38. NONFERROUS METALS	3.65	4.16	4.56	5.00	5.36	5.58	8.87
39. METAL CONTAINERS	0.16	0.17	0.18	0.19	0.21	0.22	6.61
40. FAB. STRUCTURAL METAL PRODUCTS	2.16	2.41	2.56	2.73	2.87	3.00	6.75

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
162. LABORS, EXCEPT FARM
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
41. SCREW MACHINE PROD.&STAMPINGS	1.46	1.63	1.76	1.92	2.04	2.12	7.77
42. OTHER FAB. METAL PRODUCTS	1.47	1.67	1.81	1.98	2.13	2.23	8.64
43. ENGINES & TURBINES	0.35	0.39	0.41	0.43	0.45	0.46	5.62
44. FARM & GARDEN MACHINERY	0.02	0.02	0.02	0.02	0.03	0.03	8.11
45. CONSTR. & MINING MACHINERY	0.13	0.14	0.15	0.16	0.17	0.17	5.36
46. MATERIALS HANDLING MACH. & EQ.	0.23	0.26	0.27	0.30	0.31	0.32	7.20
47. METALWORKING MACH. & EQ.	0.42	0.47	0.51	0.55	0.58	0.60	7.45
48. SPECIAL INDUSTRY MACHINERY	0.05	0.05	0.06	0.07	0.07	0.08	10.18
49. GENERAL INDUSTRY MACHINERY	0.42	0.45	0.48	0.50	0.52	0.53	5.06
50. MISC. NONELECTRICAL MACH.	0.45	0.48	0.52	0.56	0.58	0.59	5.79
51. OFFICE,COMPUTING & ACCT. MACH.	0.24	0.27	0.28	0.29	0.29	0.29	3.59
52. SERVICE INDUSTRY MACHINES	0.19	0.22	0.24	0.27	0.31	0.34	11.90
53. ELECTRICAL MACHINERY	0.64	0.72	0.77	0.83	0.88	0.90	6.92
54. HOUSEHOLD APPLIANCES	0.03	0.03	0.03	0.03	0.04	0.04	9.06
55. ELECTRIC LIGHTING & WIRING EQ.	0.72	0.80	0.86	0.94	1.00	1.04	7.78
56. RADIO,TV, & COMMUNICATION EQ.	8.83	9.92	10.65	11.29	11.62	11.61	5.63
57. ELECTRONIC COMPONENTS & ACCESS.	2.61	3.00	3.27	3.53	3.72	3.77	7.64
58. MISC. ELECTRICAL MACH. & EQ.	0.33	0.38	0.41	0.45	0.49	0.51	9.10
59. MOTOR VEHICLES & EQUIPMENT	1.02	1.21	1.37	1.63	1.90	2.22	16.96
60. AIRCRAFT & PARTS	4.96	5.47	5.88	6.32	6.58	6.57	5.77
61. OTHER TRANSPORTATION EQ.	5.99	6.30	6.49	6.61	6.81	7.00	3.16
62. INSTRUMENTS & SUPPLIES	2.11	2.36	2.55	2.78	2.94	3.02	7.44
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	0.53	0.58	0.62	0.68	0.72	0.75	7.26
64. MISC. MANUFACTURING	0.35	0.38	0.40	0.43	0.45	0.47	6.18
65. TRANSPORTATION & WAREHOUSING	16.12	17.09	17.90	19.04	19.85	20.27	4.68
66. COMMUNICATION EXC. RADIO & TV	0.07	0.08	0.08	0.09	0.10	0.10	5.85
68. UTILITIES	1.28	1.40	1.51	1.63	1.71	1.75	6.46
69. WHOLESALE & RETAIL TRADE	8.69	9.80	10.77	11.91	12.86	13.50	9.21
70. FINANCE & INSURANCE	0.04	0.05	0.05	0.06	0.06	0.07	10.28
71. REAL ESTATE & RENTAL	1.29	1.44	1.58	1.73	1.86	1.94	8.59
72. PERSONAL SERVICES EXC. AUTO.	1.06	1.20	1.32	1.46	1.58	1.68	9.72
73. BUSINESS SERVICES	3.93	4.53	5.09	5.75	6.29	6.66	11.11
74. EATING & DRINKING PLACES	0.10	0.11	0.13	0.14	0.15	0.15	8.89
75. AUTOMOBILE REPAIR & SERVICE	0.99	1.10	1.20	1.31	1.40	1.45	7.95
76. AMUSEMENTS	0.52	0.58	0.64	0.70	0.76	0.81	9.20
77. MISC. SERVICES	1.18	1.20	1.24	1.30	1.35	1.37	3.01
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	11.43	11.88	12.41	13.05	13.47	13.67	3.65
82. GOVERNMENT INDUSTRY	58.94	57.58	58.48	59.88	60.66	60.87	0.65
TOTAL, ALL INDUSTRIES	205.04	219.09	231.72	247.55	259.70	267.11	5.43

2/1/83

TOTAL EMPLOYMENT

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
162. LABORS, EXCEPT FARM
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
3. FORESTRY & FISHERY PRODUCTS	20.61	21.73	23.11	24.07	24.10	23.79	2.91
4. AGR.,FORESTRY,&FISHERY SERV.	89.50	91.98	92.96	95.00	96.15	97.69	1.77
5. IRON ORE MINING	5.50	5.91	6.32	6.26	6.14	6.00	1.76
6. NONFERROUS METAL MINING	8.68	9.17	9.55	9.80	9.75	9.83	2.52
7. COAL MINING	28.98	30.42	31.51	32.25	33.28	33.97	3.23
8. CRUDE PETROLEUM & N. GAS	9.37	9.28	9.18	8.93	8.73	8.72	-1.42
9. STONE&CLAY MINING & QUARRYING	10.04	10.25	10.59	11.04	11.28	11.37	2.52
10. CHEM&FERTILIZER MIN. MINING	2.19	2.24	2.32	2.37	2.39	2.41	2.01
11. NEW CONSTRUCTION	755.64	773.04	790.21	816.82	838.09	851.24	2.41
13. ORDNANCE & ACCESSORIES	8.94	9.10	9.22	9.39	9.48	9.54	1.31
14. FOOD & KINDRED PRODUCTS	205.10	209.00	211.37	211.73	210.77	210.16	0.49
15. TOBACCO MANUFACTURES	15.18	15.17	14.98	14.73	14.56	14.28	-1.20
16. FABRIC,YARN & THREAD MILLS	38.74	39.46	40.08	40.43	40.36	39.98	0.63
17. MISC. TEXTILE GOODS	9.79	10.17	10.58	10.93	11.11	11.19	2.71
18. APPAREL	46.08	46.41	47.41	48.25	48.25	48.22	0.91
19. MISC. FABRICATED TEXTILE PROD.	15.32	15.68	16.08	16.36	16.53	16.67	1.70
20. LUMBER & WOOD PRODUCTS	120.13	129.13	133.12	137.13	137.57	135.39	2.42
21. WOOD CONTAINERS	7.37	7.36	7.50	7.69	7.77	7.81	1.16
22. HOUSEHOLD FURNITURE	30.65	32.26	33.25	34.31	35.00	35.27	2.85
23. OTHER FURNITURE & FIXTURES	15.14	15.22	15.67	16.11	16.43	16.74	2.03
24. PAPER & ALLIED PRODUCTS	56.06	57.62	58.12	58.22	58.07	57.89	0.65
25. PAPERBOARD CONTAINERS & BOXES	24.31	24.92	25.45	25.90	26.14	26.26	1.56
26. PRINTING & PUBLISHING	43.29	43.04	42.95	42.86	42.63	42.38	-0.42
27. CHEMICALS & PRODUCTS	24.48	24.61	24.67	24.60	24.45	24.29	-0.16
28. PLASTICS & SYNTHETIC MATLS.	7.58	7.72	7.86	7.92	7.88	7.76	0.48
29. DRUGS,CLEANING & TOILET PREP.	19.13	18.95	18.94	18.87	18.59	18.35	-0.83
30. PAINTS & ALLIED PRODUCTS	4.17	4.33	4.44	4.56	4.61	4.63	2.10
31. PET REFINING & REL. PROD.	12.41	12.31	12.30	12.33	12.26	12.16	-0.40
32. RUBBER & MISC. PLASTICS PROD.	58.86	60.51	62.71	64.41	65.73	66.09	2.34
33. LEATHER TANNING & FINISHING	2.91	3.01	3.11	3.11	3.11	3.10	1.31
34. FOOTWEAR & OTHER LEATHER PROD.	14.41	14.41	14.43	14.35	14.19	14.04	-0.52
35. GLASS & GLASS PRODUCTS	18.28	18.60	18.95	19.11	19.04	18.89	0.66
36. STONE & CLAY PRODUCTS	54.15	55.15	55.99	57.28	57.46	56.67	0.91
37. PRIMARY FERROUS METALS	96.80	99.73	102.82	104.06	104.42	103.93	1.43
38. NONFERROUS METALS	43.11	44.52	46.13	47.28	47.84	48.32	2.30
39. METAL CONTAINERS	10.61	10.46	10.48	10.67	10.74	10.80	0.36

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
162. LABORS, EXCEPT FARM
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
40. FAB. STRUCTURAL METAL PRODUCTS	48.51	48.20	48.97	50.20	50.87	51.15	1.07
41. SCREW MACHINE PROD.&STAMPINGS	23.80	25.04	25.86	26.32	26.47	26.59	2.24
42. OTHER FAB. METAL PRODUCTS	32.01	32.66	33.74	34.45	34.89	35.35	2.01
43. ENGINES & TURBINES	4.18	4.23	4.30	4.26	4.20	4.14	-0.21
44. FARM & GARDEN MACHINERY	5.44	5.58	5.87	5.95	6.02	6.08	2.27
45. CONSTR. & MINING MACHINERY	11.18	11.60	11.98	12.19	12.30	12.24	1.82
46. MATERIALS HANDLING MACH. & EQ.	4.00	4.05	4.21	4.31	4.35	4.37	1.80
47. METALWORKING MACH. & EQ.	8.13	8.31	8.65	8.85	8.94	8.96	1.95
48. SPECIAL INDUSTRY MACHINERY	6.45	6.48	6.69	6.87	6.92	6.95	1.49
49. GENERAL INDUSTRY MACHINERY	9.47	9.48	9.70	9.73	9.67	9.60	0.28
50. MISC. NONELECTRICAL MACH.	3.90	3.93	4.03	4.05	4.02	4.01	0.57
51. OFFICE,COMPUTING & ACCT. MACH.	6.45	6.46	6.49	6.38	6.25	6.18	-0.85
52. SERVICE INDUSTRY MACHINES	10.64	10.91	11.28	11.32	11.20	11.07	0.78
53. ELECTRICAL MACHINERY	12.95	12.90	13.20	13.23	13.11	12.96	0.01
54. HOUSEHOLD APPLIANCES	10.33	10.57	10.81	11.13	11.33	11.44	2.06
55. ELECTRIC LIGHTING & WIRING EQ.	14.98	15.01	15.34	15.64	15.81	15.95	1.25
56. RADIO,TV, & COMMUNICATION EQ.	20.90	20.90	21.06	20.93	20.64	20.51	-0.38
57. ELECTRONIC COMPONENTS & ACCESS.	11.91	12.00	12.18	12.25	12.18	12.02	0.18
58. MISC. ELECTRICAL MACH. & EQ.	12.18	12.55	12.99	13.08	13.19	13.24	1.69
59. MOTOR VEHICLES & EQUIPMENT	52.51	54.80	56.57	57.39	57.93	58.18	2.07
60. AIRCRAFT & PARTS	9.94	10.08	10.09	10.14	9.89	9.62	-0.66
61. OTHER TRANSPORTATION EQ.	20.68	21.25	21.96	22.39	22.41	22.56	1.75
62. INSTRUMENTS & SUPPLIES	18.11	18.29	18.87	19.46	19.83	20.02	2.02
63. OPTICAL,OPHTHALMIC & PHOTO EQ.	12.26	12.28	12.65	13.05	13.32	13.50	1.96
64. MISC. MANUFACTURING	31.35	31.89	32.97	33.95	34.54	34.85	2.13
65. TRANSPORTATION & WAREHOUSING	379.24	388.92	398.01	408.87	412.55	413.67	1.75
66. COMMUNICATION EXC. RADIO & TV	2.99	3.03	3.13	3.18	3.27	3.32	2.12
68. UTILITIES	59.34	59.68	59.97	60.24	60.56	60.79	0.48
69. WHOLESALE & RETAIL TRADE	1,420.68	1,460.52	1,500.29	1,533.09	1,557.64	1,583.40	2.19
70. FINANCE & INSURANCE	4.80	4.92	5.07	5.24	5.42	5.60	3.13
71. REAL ESTATE & RENTAL	46.80	47.90	49.19	50.41	51.38	52.18	2.20
72. PERSONAL SERVICES EXC. AUTO.	57.59	59.29	61.26	63.25	65.24	67.09	3.10
73. BUSINESS SERVICES	81.07	85.86	90.99	96.69	101.88	106.44	5.60
74. EATING & DRINKING PLACES	6.55	6.61	6.66	6.67	6.66	6.64	0.26
75. AUTOMOBILE REPAIR & SERVICE	68.35	70.19	71.31	72.12	72.98	74.01	1.60
76. AMUSEMENTS	53.58	54.75	56.69	58.43	60.29	62.02	2.97
77. MISC. SERVICES	183.53	183.97	184.95	187.24	190.18	193.65	1.08
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	253.14	258.55	264.03	269.41	272.93	275.61	1.72
82. GOVERNMENT INDUSTRY	420.45	415.04	414.29	416.10	418.02	421.00	0.03

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
162. LABORS, EXCEPT FARM
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
TOTAL, ALL INDUSTRIES	5,488.06	5,605.35	5,724.13	5,840.74	5,916.97	5,975.26	1.72

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.

2/1/83

DEFENSE ECONOMIC IMPACT MODELING SYSTEM
OCCUPATION BY INDUSTRY MODEL
ESTIMATES OF INDUSTRIAL EMPLOYMENT BY OCCUPATION
163. FARMERS&FARM WORKERS
(THOUSANDS OF PERSONS)

INDUSTRY	82	83	84	85	86	87	AVG. ANN % GROWTH 82 TO 87
DEFENSE INDUCED EMPLOYMENT							
1. LIVESTOCK & PRODUCTS	2.54	2.65	2.71	2.78	2.90	3.00	3.43
2. OTHER AGRICULTURAL PRODUCTS	4.07	4.02	4.22	4.42	4.58	4.68	2.81
4. AGR.,FORESTRY,&FISHERY SERV.	0.56	0.61	0.64	0.70	0.74	0.78	6.86
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	37.80	39.83	41.37	43.11	44.37	45.05	3.57
TOTAL, ALL INDUSTRIES	44.97	47.10	48.93	51.00	52.59	53.51	3.54
TOTAL EMPLOYMENT							
1. LIVESTOCK & PRODUCTS	411.07	417.33	413.71	409.54	410.35	411.03	0.00
2. OTHER AGRICULTURAL PRODUCTS	2,724.26	2,736.00	2,749.87	2,741.43	2,736.70	2,733.78	0.07
4. AGR.,FORESTRY,&FISHERY SERV.	30.21	31.04	31.37	32.06	32.45	32.97	1.76
81. SELF-EMPLOYED & UNPAID FAMILY WORKERS	5,786.02	5,820.45	5,839.80	5,818.00	5,811.53	5,808.39	0.08
TOTAL, ALL INDUSTRIES	8,951.61	9,004.88	9,034.81	9,001.09	8,991.08	8,986.23	0.08

NOTE: INDUSTRY EMPLOYMENT ESTIMATES ARE BASED ON THE BLS ESTABLISHMENT SURVEY, NOT THE BEA COMMODITY SURVEY.